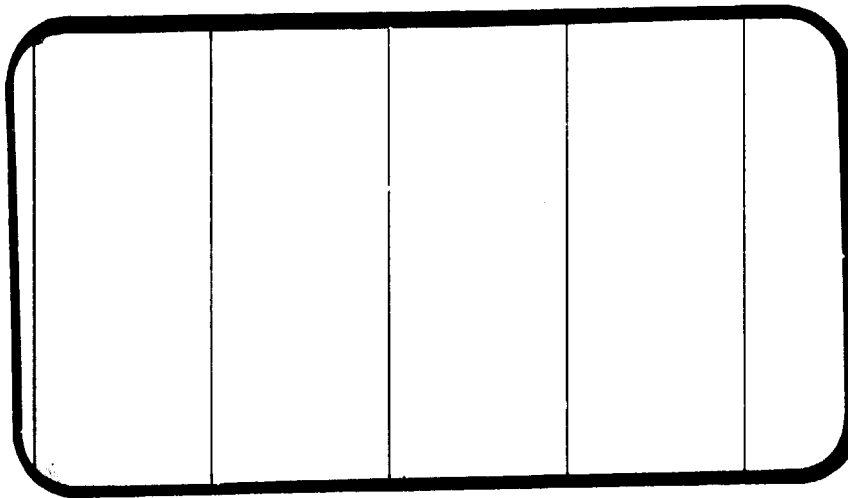




NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NASA CR-

134419



(NASA-CR-134419) DATA REPORT FOR TESTS ON
THE HEAT TRANSFER EFFECTS OF THE 0.0175
SCALE ROCKWELL INTERNATIONAL SPACE SHUTTLE
VEHICLE MODEL 22-OT IN THE AEDC 50 INCH B
WIND TUNNEL (0H4B), VOLUME 1 (Chrysler

N75-18290

G3/18 Unclass
12298

SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANAGEMENT services

SPACE DIVISION  CHRYSLER
CORPORATION

January, 1975

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NASA CR-134,419

DATA REPORT FOR TESTS ON THE HEAT TRANSFER
EFFECTS OF THE 0.0175-SCALE
ROCKWELL INTERNATIONAL SPACE SHUTTLE VEHICLE MODEL
22-0T IN THE AEDC 50-INCH B WIND TUNNEL (OH4B)
VOLUME 1 OF 3

By

T. F. Foster and W. J. Grifall,
Rockwell International Space Division
W. Martindale, AEDC

Prepared under NASA Contract Number NAS9-13247

By

Data Management Services
Chrysler Corporation Space Division
New Orleans, La. 70189

for

Engineering Analysis Division
Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number: AEDC (VA 352)
NASA Series Number: OH4B
Test Dates: September 29 to October 4, 1973
Model Number: 22-0T

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Chrysler Corporation Space Division assumes no responsibility for the data presented other than display characteristics.

DATA REPORT FOR TESTS ON THE HEAT TRANSFER
EFFECTS OF THE 0.0175-SCALE
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ABSTRACT

Results of wind tunnel heat transfer tests of 0.0175-scale Rockwell International Space Shuttle Vehicle configurations for orbiter alone, tank alone, and orbiter plus external tank are presented in this report. Body flap shielding of SSME's during simulated entry was also investigated.

The tests were conducted at Mach 8 for thirteen Reynolds number per foot values ranging from 0.5×10^6 to 3.72×10^6 .

TABLE OF CONTENTS

	Page
ABSTRACT	iii
INDEX OF MODEL FIGURES	2
INDEX OF DATA FIGURES	3
INTRODUCTION	5
NOMENCLATURE	6
REMARKS	9
CONFIGURATIONS INVESTIGATED	10
TEST FACILITY DESCRIPTION	11
TEST PROCEDURES	12
DATA REDUCTION	13
REFERENCE	15
TABLES	
I. TEST CONDITIONS	16
II. DATA SET/RUN NUMBER COLLATION SUMMARY	17
III. MODEL DIMENSIONAL DATA	24
IV. THERMOCOUPLE LOCATIONS	34
V. THERMOCOUPLE HOGKUP SCHEDULE	50
FIGURES	
MODEL	60
DATA	69
APPENDIX	
TABULATED DATA	
RECOVERY FACTOR 1.0	
RECOVERY FACTOR 0.9 SEE VOLUME II	
RECOVERY FACTOR 0.85 SEE VOLUME III	

INDEX OF MODEL FIGURES

Figure	Title	Page
1.	Model instrumentation reference system.	60
2.	Orbiter instrumentation.	
a.	Instrumented Nozzle	61
b.	Instrumented Base Plate	62
c.	Wing Leading Edge Clusters B & C T/C Locations	63
d.	External Tank T/C Locations Side Views	64
e.	External Tank T/C Locations (Locations around plumbing lines) Top View	65
3.	Model photographs.	
a.	Second Stage Configuration Front View	66
b.	Second Stage Configuration Side View	67
c.	Re-entry Nozzle Heating Installation	68

INDEX OF DATA FIGURES

FIGURE NUMBER	TITLE	COEFFICIENT SCHEDULE	VARYING PARAMETERS	PAGE NUMBER
Fig. 4	Heat Transfer Coefficients on External Tank.	A	HAW/HT	1-15
Fig. 5	Heat Transfer Coefficients on Orbiter Fuselage.	B	HAW/HT	16-20
Fig. 6	Heat Transfer Coefficients on Lower Wing Surface of Orbiter.	C	HAW/HT	21-29
Fig. 7	Heat Transfer Coefficients on Upper Wing Surface of Orbiter.	C	HAW/HT	30-33
Fig. 8	Heat Transfer Coefficients on Left Vertical Tail of Orbiter.	D	HAW/HT	34-36
Fig. 9	Heat Transfer Coefficients on Orbiter OMS Pod.	E	HAW/HT	37
Fig. 10	Heat Transfer Coefficients on Orbiter, $Y = 0.875$.	B	HAW/HT	38-40
Fig. 11	Heat Transfer Coefficients on Orbiter Fuselage, $Z = 7.525$.	F	HAW/HT	41
Fig. 12	Heat Transfer Coefficients on Orbiter Left Main Nozzle.	G	HAW/HT	42-44
Fig. 13	Heat Transfer Coefficients on Orbiter RCS Center.	F	HAW/HT	45

INDEX OF DATA FIGURES (Concluded)

COEFFICIENT SCHEDULE:

- A: HI/HO, HU/HO vs X/LT
- B: HI/HO, HU/HO vs X/L
- C: HI/HO, HU/HO vs X/C
- D: HU/HO vs X/C
- E: HI/HO vs X/L
- F: HU/HO vs X/L
- G: HU/HO vs X

NOTE: A large volume of working data plots were generated and released by the Data Management Services during initial data processing activities. However, for documentation purposes, only a small representative selection of plots are included. The data will remain on file and be available for any future applications.

INTRODUCTION

The experimental investigation described in this report was performed to obtain aerodynamic heating rate data in both ascent and entry flight regimes of the Space Shuttle Vehicle. Second stage ascent interference heating was investigated with the orbiter alone, tank alone and orbiter plus external tank configurations at angles of attack of -10° , -5° , 0° , and 5° and sideslip angles of 0° and -2° .

Orbiter entry heating data was obtained over an angle of attack range of 25° to 45° for sideslip angles of 0° and 5° . Effects of control surface deflections and body flap nozzle shielding were also investigated.

The test program was conducted in the Arnold Engineering Development Center VKF 50-inch B tunnel at Mach 8 for free-stream Reynolds number per foot values from 0.5×10^6 to 3.72×10^6 .

NOMENCLATURE

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
b		model skin thickness, span, in
c		chord, in
c_p		specific heat of model material, BTU/lbm - °R
h		heat transfer coefficient, BTU/ft ² -sec-°R
h_{ref}	HREF	reference heat transfer coefficient, BTU/ft ² -sec-R
h_i/h_o	HI/HO	ratio of interference heat transfer coefficient to stagnation heat transfer coefficient
h_i/h_u	HI/HU	ratio of interference heat transfer coefficient to undisturbed heat transfer coefficient
h_u/h_o	HU/HO	ratio of undisturbed heat transfer coefficient to stagnation heat transfer coefficient
H		enthalpy, BTU/lbm
r	HAW/HT	adiabatic wall temperature ratio, T_{aw}/T_o (recovery factor). NOTE: Where HAW/HT = 0.0 in displayed data, the heat transfer coefficient has been calcu- lated using a recovery factor calculated from $T_{aw}/T_o =$ ($0.867 + 0.133 \sin^{1.55} \delta$), where $\delta = (\alpha + \theta)$. Alpha is the model angle of attack and theta is local surface angle.
L		length, in
M	MACH	Mach number
Re	RN/L	unit Reynolds number, per foot
t		time, sec
T		temperature, °R
T_o		stagnation temperature, °R
T_i		initial temperature, °R

NOMENCLATURE - Continued

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
T_{aw}		adiabatic wall temperature, °R
Q_i		initial heat transfer rate, BTU/sec
T/C		thermocouple
W		model material density, lbm/ft ³
x	X	axial distance from nose to corresponding component, in
x/c	X/C	chordwise location, fraction of local chord
x/L	X/L	longitudinal location, fraction of length
y	Y	spanwise distance from centerline, in
x/LT	X/LT	longitudinal location on tank, fraction of length
z	Z	waterplane distance, in
2Y/B	2Y/B	spanwise location of semispan
Z/BV	Z/BV	vertical tail location, fraction of height
δ_a		aileron deflection angle, degrees
δ_{BF}	B.FLAP	body flap deflection angle, degrees
δ_r		rudder deflection angle, degrees
β	Beta	sideslip angle, degrees
α	ALPHA	angle of attack, degrees
δ_e	ELEVON	elevon deflection angle, degrees
θ	PHI	radial location on tank, degrees
θ_n	PHIN	radial location on orbiter nozzle, degrees

NOMENCLATURE - Concluded

Subscripts

aw	adiabatic wall condition
i	initial condition
O	Orbiter
T	tank
V	vertical tail
w	wall conditions
u	stagnation conditions

REMARKS

During the course of mated configuration testing, it was felt that the forward canopy to wing bottom surface seam may have affected transition. This seam was repaired with dental plaster and 48 transition study runs were made at the end of the test with the orbiter alone configuration. These runs (177-224) consisted of eleven Re/ft values at two angles of attack, and demonstrated that the seam did not prematurely trip the boundary layer.

The original run schedule did not include obtaining data from the 11 T/C's on the windshield, but during the test high heating rates were observed in the canopy area. Therefore, three runs (#31, 32, and 33, were added to the run schedule to obtain this data. The first 11 T/C's of the data acquisition system switch position No. 1 were replaced with the windshield T/C's for these runs.

CONFIGURATIONS INVESTIGATED

The 22-OT model is a 0.0175-scale replica of the Vehicle 3 configuration Rockwell International Space Shuttle Orbiter and external tank per Drawing Number VL70-000139. The model was a thin skin thermocouple model instrumented with 428 iron-constantan thermocouples and was sting mounted through the orbiter base. The tank was sting mounted to the orbiter sting.

Provisions were made to test elevon deflections of 0° , $+5^\circ$, $+10^\circ$; body flap deflections of 0° , $+10^\circ$; and rudder flare angles of 0° and 40° . Entry orbiter nozzle heating data was obtained by replacing the orbiter main sting with an instrumented base plate and nozzle and an offset sting mounted through the vertical tail area. The offset sting simulated a rudder flare deflection angle of 40° .

The main model structure is 15-5 PH stainless steel with instrumented areas of 15-5 PH and 17-7 PH. Thermocouple locations and local skin thicknesses are presented in Table 4. The model instrumentation reference system is described in Figure 1. The configurations tested are described below with the component definitions given in Table 3.

$B_{17}, C_7, M_4, F_5, W_{103}, E_{22}, V_7, R_5$	Orbiter alone (O_1)
$B_{17}, C_7, M_4, F_5, W_{103}, E_{22}, V_7, R_5, T_{10}$	Orbiter plus tank ($O_1 + T_{10}$)
T_{10}	Tank alone (T_{10})
$B_{17}, C_7, M_4, F_5, W_{103}, E_{22}, V_7, R_5, N$	Descent orbiter alone nozzle heating (O_2)

TEST FACILITY DESCRIPTION

The Arnold Engineering Development Center (AEDC) is an Air Force Facility located in Tullahoma, Tennessee. The tunnel used, Tunnel B, is located in the Von Karman Facility portion of this center. Engineering and other technical operations in this tunnel are performed by contractor personnel of ARO, Inc.

Tunnel B is a continuous, closed circuit, variable density wind tunnel with an axisymmetric contoured nozzle and a 50-inch diameter test section. The tunnel can be operated at a nominal Mach number of 6 or 8 at stagnation pressures from 20 to 300 and 50 to 900 psia, respectively, and at a stagnation temperature of up to 1350°R. The model may be injected into the tunnel for a test run and then retracted for model cooling or model changes without interrupting the tunnel flow.

TEST PROCEDURES

The model was installed upright for second stage testing and offset-sting nozzle heating and transition studies. The orbiter was inverted for entry, orbiter alone testing. All configurations were leveled in both pitch and yaw planes. Yaw angles were obtained by combinations of roll and pitch with the tunnel model support system.

All instrumentation leads were routed internally through the model support apparatus to the data acquisition patching network outside the tunnel. Two hundred ninety one thermocouples were connected to the instrumentation patch board. Since the data acquisition system capability was ninety-seven recorded thermocouples per run, three runs were necessary for one test point. Each run of the test point series corresponded to one switch position (97 channels) of the data acquisition system.

The model was injected into the flow and remained on centerline for approximately one second. After retraction, the model was cooled to an isothermal state by air from high pressure manifolds.

For orbiter transition studies and nozzle heating tests, the orbiter base and main sting were removed and replaced with an instrumented base plate and nozzle. The model was then mounted with an offset sting through the vertical tail area. Only two main engines were simulated and only the left nozzle was instrumented. Shadowgraphs were taken for each run of the program.

DATA REDUCTION

Thermocouple outputs were recorded on magnetic tape at the rate of 20 times per second from the start of the injection cycle until about 4 seconds after the model reached the tunnel centerline. The heat transfer coefficient, h , was computed from the relation

$$h = Wbc_p \frac{d[\ln (\frac{T_o - T_{wi}}{T_o - T_w})]}{dt}$$

where

W = model skin density, lbm/ft³

b = model skin thickness, ft

c_p = model skin specific heat, BTU/lbm - °R

T_{wi} = initial model skin temperature, °R

This relation was derived from the equation

$$h = \frac{Wbc_p \frac{dT_w}{dt}}{T_o - T_w}$$

which neglects conduction losses and the assumptions that h , W , and c_p are constants.

If conduction losses are indeed very small, then

$$\ln \left[\frac{T_o - T_{wi}}{T_o - T_w} \right]$$

versus time is very nearly linear. Even when conduction effects are significant, a small linear portion of the curve can generally be found

at early time. It is for this reason that a linear least squares curve fit of $\ln((T_o - T_{wi})/(T_o - T_w))$, begun as soon as it could be determined that the model had reached uniform flow, was used to compute the derivative

$$\frac{d[\ln (\frac{T_o - T_{wi}}{T_o - T_w})]}{dt}$$

and then h .

The lengths of the curve fits were kept as short as possible and yet be consistent with system noise characteristics. These curve fit lengths are given below:

Range	No. of Points
$32 < \frac{dT_w}{dt}$	5
$16 < \frac{dT_w}{dt} \leq 32$	7
$8 < \frac{dT_w}{dt} \leq 16$	9
$4 < \frac{dT_w}{dt} \leq 8$	13
$2 < \frac{dT_w}{dt} \leq 4$	17
$1 < \frac{dT_w}{dt} \leq 2$	25
$\frac{dT_w}{dt} < 1$	41

REFERENCE

1. Foster, T.F.: Pretest Information for Testing of the 22-OT 0.0175-Scale Thin Skin Thermocouple model in the AEDC 50-inch B Wind Tunnel. Rockwell International Publication Number SD73-SH-0237, September 4, 1973.

TABLE I. - TEST CONDITIONS

TEST : OH4B	DATE : Sept. 1973		
TEST CONDITIONS			
MACH NUMBER	REYNOLDS NUMBER (per unit length)	DYNAMIC PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Fahrenheit)
8	$0.5 \times 10^6/\text{ft}$	110	800
8	$0.68 \times 10^6/\text{ft}$	140	810
8	$1.0 \times 10^6/\text{ft}$	210	815
8	$1.25 \times 10^6/\text{ft}$	265	825
8	$1.50 \times 10^6/\text{ft}$	325	835
8	$1.75 \times 10^6/\text{ft}$	380	840
8	$2.00 \times 10^6/\text{ft}$	425	840
8	$2.25 \times 10^6/\text{ft}$	500	850
8	$2.50 \times 10^6/\text{ft}$	545	850
8	$2.75 \times 10^6/\text{ft}$	605	860
8	$3.00 \times 10^6/\text{ft}$	675	870
8	$3.35 \times 10^6/\text{ft}$	765	880
8	$3.72 \times 10^6/\text{ft}$	860	880

BALANCE UTILIZED: _____

	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF	_____	_____	_____
SF	_____	_____	_____
AF	_____	_____	_____
PM	_____	_____	_____
RM	_____	_____	_____
YM	_____	_____	_____

COMMENTS:

TABLE II.

TEST: C ₁ T ₁₀		DATA SET/RUN NUMBER COLLATION SUMMARY										DATE: SEPT. 29, 1973									
DATA SET IDENTIFIER	CONFIGURATION	SCHD.				PARAMETERS/VALUES				NO. OF RUNS	THERMOCOUPLE HOOKUP SCHEDULE										
		a	B	KUL	BE	SE	M				1	2	3	4	5	6	7	8	9	10	
(JTK)001	C ₁ T ₁₀	-10	0	372	0	0	8			3	10	11	12								
		-5	0							3	7	8	9								
		0	0							3	1	2	3								
		5	0							3	4	5	6								
(JTK)002		0	-2							3	13	14	15								
		0	0	372						3	1	2	3								
(JTK)003		-10	0	068						3	25	26	27								
		-5	0							3	21	23	24								
		0	0							3	16	17	18								
(JTK)004		5	0							3	19	20	21								
		0	-2							3	28	29	30								
		0	0	068						3	16	17	18								
(JTK)005		-10	0	372						1				33							
		-5	0							1				32							
		0	0	372	0	0	8			1				31							
	C ₁ T ₁₀																				

* The first character of the dataset identifier refers to recovery factor used: r=1.0 (R), r=0.9 (A), r=0.85 (B), r=0.0 (C). The fourth character of the dataset identifier identifies component data under consideration: wing data, tank data, orbiter data etc.

01 + T10 configuration, Dep. Var. is HI/HO

01, 02, T10 configurations, Dep. Var. is HU/HO

10VAR (1) 10VAR (2) NOV

* The first character of the dataset identifier refers to recovery factor used: r=1.0 (R), r=0.9 (A), r=0.85 (B), r=0.0 (C). The fourth character of the dataset identifier identifies component data under consideration: wing data, tank data, orbiter data etc.

01 + T10 configuration, Dep. Var. is HI/HO

01, 02, T10 configurations, Dep. Var. is HU/HO

IDVAR (1) IDVAR (2) NOV

TABLE II. - Continued.

[illegible]

TABLE II. - Continued.

TEST: 108		DATE: SEPT 29, 1973										
		DATA SET RUN NUMBER COLLATION SUMMARY										
		TEST RUN NUMBERS										
TEST	TYPE	TEST RUN NUMBERS										
		1	2	3	4	5	6	7	8	9	10	
108	13	35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
108	14	35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
108	15	35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
		35	30	35	40	30	35	25	30	35	30	
TYPE OF DATA		IDVAR (1) IDVAR (2) NDV										
OR OR P												
SCHEDULE												

TABLE II. - Continued.

[illegible]

TABLE II. - Continued.

[illegible]

TABLE II. - Concluded.

[illegible]

TABLE III. - MODEL DIMENSIONAL DATA

MODEL COMPONENT: BODY - B₁₇

GENERAL DESCRIPTION: Fuselage, 3 configuration, lightweight orbiter per
Rockwell lines drawing No. VL70-000139

MODEL SCALE: 0.0175

DRAWING NO.: VL70-000139

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length - In.	<u>1290.3</u>	<u>22.58025</u>
Max. width - In.	<u>267.6</u>	<u>4.6830</u>
Max. depth - In.	<u>244.5</u>	<u>4.27875</u>
Fineness Ratio	<u>4.82175</u>	<u>4.82175</u>
Area - ft ²		
Max. Cross-sectional	<u>386.67</u>	<u>0.11842</u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

TABLE III. - Continued.

MODEL COMPONENT: CANOPY - C7

GENERAL DESCRIPTION: Configuration 3 per Rockwell Lines VL70-000139

Insufficient information to complete dimensional data at this time.

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000139

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length ($X_0 = 433$ to $X_0 = 670$) - in FS	<u>237</u>	<u>4.148</u>
Max.Width	<u> </u>	<u> </u>
Max.Depth ($Z_0 =$ to $Z_0 = 501$) in FS	<u> </u>	<u> </u>
Fineness ratio	<u> </u>	<u> </u>
Area - ft ²	<u> </u>	<u> </u>
Max. Cross-sectional	<u> </u>	<u> </u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

TABLE III. - Continued.

MODEL COMPONENT: OMS POD - M₄

GENERAL DESCRIPTION: Orbital maneuvering system pods located on the orbiter aft fuselage.

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000139

DIMENSIONS:

	FULL SCALE	MODEL SCALE
Length - In.	346.0	6.0550
Max. Width - In.	108.0	1.890
Max. Depth - In.	113.0	113.0
Fineness Ratio	.	
Area - ft ²		
Max cross sectional		
Planform		
Wetted		
Base		

Q of OMS Pod

WP = 463.9 In. FS; WP 400 + 63.9 = 463.9

BP = 80.0 In. FS

LENGTH: 1214.0 to 1560.0 = 346.0 In. FS

NOTE: M₄ is identical to M₃ of 2A configuration, except intersection to body.

TABLE III. - Continued.

MODEL COMPONENT: BODY FLAP - F₅

GENERAL DESCRIPTION: 3 Configuration per Rockwell Lines VL70-000139

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000139

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length - In.	<u>84.70</u>	<u>1.48225</u>
Max. width - In.	<u>267.6</u>	<u>4.6830</u>
Max. Depth	<u> </u>	<u> </u>
Fineness Ratio	<u> </u>	<u> </u>
Area - ft ²		
Max Cross-sectional	<u> </u>	<u> </u>
Planform	<u>142.5195</u>	<u>0.04365</u>
Wetted	<u> </u>	<u> </u>
Base	<u>38.0958</u>	<u>0.01167</u>

-TABLE III. - Continued.

MODEL COMPONENT: WING-W 103

GENERAL DESCRIPTION: Configuration 3 Orbiter per Lines VL70-000139.

NOTE: Same planform as W87, except dihedral at TE

Scale Model = 0.0175

TEST NO.

DWG. NO. VL70-000139

DIMENSIONS:

FULL-SCALE

MODEL SCALE

TOTAL DATA

Area (Theo.) Ft^2

Planform

2690.00

0.82381

Span (Theo. In.

936.68

16.39190

Aspect Ratio

2.265

2.265

Rate of Taper

1.177

1.177

Taper Ratio

0.200

0.200

Dihedral Angle, degrees (@ TE of Elevon)

3.500

3.500

Incidence Angle, degrees

3.000

3.000

Aerodynamic Twist, degrees

+3.000

+3.000

Sweep Back Angles, degrees

Leading Edge

45.000

45.000

Trailing Edge

-10.24

-10.24

0.25 Element Line

35.209

35.209

Chords:

Root (Theo) B.P.O.O.

689.24

12.06170

Tip, (Theo) B.P.

137.85

2.41238

MAC

474.81

8.30418

Fus. Sta. of .25 MAC

1136.89

19.82558

W.P. of .25 MAC

299.20

5.2360

B.L. of .25 MAC

182.13

3.18728

EXPOSED DATA

Area (Theo) Ft^2

1752.29

0.53664

Span, (Theo) In. BP108

720.68

12.61190

Aspect Ratio

2.058

2.058

Taper Ratio

0.2451

0.2451

Chords

Root BP108

562.40

9.8420

Tip 1.00 $\frac{b}{2}$

137.85

2.41238

MAC

393.03

6.87802

Fus. Sta. of .25 MAC

1185.31

20.74292

W.P. of .25 MAC

300.20

5.23350

B.L. of .25 MAC

251.76

2.51580

Airfoil Section (Rockwell Mod NASA)

XXXX-64

Root $\frac{b}{2}$ =

0.10

0.10

Tip $\frac{b}{2}$ =

0.12

0.12

Data for (1) of (2) Sides

Leading Edge Cuff

Planform Area Ft^2

120.33

0.03685

Leading Edge Intersects Fus M. L. @ Sta

500.0

9.800

Leading Edge Intersects Wing @ Sta

1035.0

18.11250

TABLE III. - Continued.

MODEL COMPONENT: ELEVON- E22GENERAL DESCRIPTION: 3 configuration per W103 Rockwell Lines DrawingVL70-000139 data for (1) of (2) sides.

SCALE MODEL: 0.0175

DRAWING NUMBER: VL70-000139

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Area - ft ²	<u>205.52</u>	<u>0.06294</u>
Span (equivalent) - In.	<u>353.34</u>	<u>6.18345</u>
Inb'd equivalent chord	<u>114.78</u>	<u>2.00865</u>
Outb'd equivalent chord	<u>55.00</u>	<u>0.96250</u>
Ratio movable surface chord/ total surface chord		
At inb'd equiv. chord	<u>.208</u>	<u>.208</u>
At outb'd equiv. chord	<u>.400</u>	<u>.400</u>
Sweep-back angles, degrees		
Leading edge	<u>0.00</u>	<u>0.00</u>
Trailing edge	<u>- 10.24</u>	<u>- 10.24</u>
Hingeline	<u>0.00</u>	<u>0.00</u>
Area Moment (Normal to hingeline) - ft ³ (Product of Area Moment)	<u>1548.07</u>	<u>0.00829</u>

TABLE III. - Continued.

MODEL COMPONENT: VERTICAL, V₇ (Lightweight Orbiter Configuration)

GENERAL DESCRIPTION: Centerline vertical tail, double-wedge airfoil with rounded leading edge.

NOTE: Same as V₅ but with manipulator housing removed.

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000139, VL70-000095

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
TOTAL DATA		
Area (Theo) - ft ²	425.92	0.13044
Planform		
Span (Theo) - In.	315.72	5.52510
Aspect ratio	1.675	1.675
Rate of taper	0.507	0.507
Taper ratio	0.404	0.404
Sweep-back angles, degrees		
Leading edge	45.000	45.000
Trailing edge	26.249	26.249
0.25 Element line	41.130	41.130
Chords:		
Root (Theo) WP	268.50	4.69875
Tip (Theo) WP	108.47	1.89822
MAC	199.81	3.49667
Fus. Sta. of .25 MAC	1463.50	25.61125
W.P. of .25 MAC	635.522	11.12164
B.L. of .25 MAC	0.00	0.00
Airfoil section:		
Leading wedge angle - deg.	10.000	10.000
Trailing wedge angle - deg.	14.920	14.920
Leading edge radius	2.0	0.0350
Void area - FT ²		
	13.17	0.00403
Blanketed area		
	0.00	0.00

TABLE III. - Continued.

COMPONENT DIMENSIONAL DATA

MODEL COMPONENT: RUDDER - R₅GENERAL DESCRIPTION: 2A, 3 and 3A configuration per Rockwell Lines Drawing
VL70-000095

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000139, VL70-000095

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Area - ft ²	<u>106.38</u>	<u>0.03258</u>
Span (equivalent) - in.	<u>201.0</u>	<u>3.5175</u>
Inb'd equivalent chord	<u>91.585</u>	<u>1.60274</u>
Outb'd equivalent chord	<u>50.833</u>	<u>0.88958</u>
Ratio movable surface chord/ total surface chord		
At inb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
At outb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
Sweep-back angles, degrees		
Leading edge	<u>34.83</u>	<u>34.83</u>
Trailing edge	<u>26.25</u>	<u>26.25</u>
hingeline	<u>34.83</u>	<u>34.83</u>
Area Moment (normal to hingeline) - ft ³ Product of area and mean chord	<u>526.13</u>	<u>0.00282</u>

TABLE III. - Continued.

MODEL COMPONENT: EXTERNAL TANK - T₁₀GENERAL DESCRIPTION: External Oxygen-hydrogen tank, 3 configuration, per
Rockwell Lines drawing VL78-000041 and VL72-000088

MODEL SCALE: 0.0175

DRAWING NUMBER: VL72-000088, VL78-000041

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length - In. (Nose @ X _T = 309)	<u>1865</u>	<u>32.63750</u>
Max. width (Dia) - In.	<u>324</u>	<u>5.670</u>
Max. depth	<u>--</u>	<u>--</u>
Fineness Ratio	<u>5.75617</u>	<u>5.75617</u>
Area - ft ²		
Max. Cross-Sectional	<u>572.555</u>	<u>0.17534</u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>
WP of Tank Centerline (X _T) In.	<u>400.0</u>	<u>7.00</u>

TABLE III. - Concluded.

MODEL COMPONENT: MP3 NOZZLES - NGENERAL DESCRIPTION: Only the exterior surface of the nozzle was simulated.MODEL SCALE: 0.0175DRAWING NUMBER: UL70-000139

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
WASH NO.		
Length - In.		
Gimbal Point to Exit Plane		
Throat to Exit Plane		
Diameter - In.		
Exit		
Throat		
Inlet		
Area - ft ²		
Exit		
Throat		
Gimbal Point (Station) In.		
Upper Nozzle		
X		
Y		
Z		
Lower Nozzles		
X		
Y		
Z		
Nozzle Position - Deg.		
Upper Nozzle		
Pitch		
Yaw		
Lower Nozzles		
Pitch		
Yaw		

Table IV. -Orbiter T/C Locations.
Model 22-OT

T/C NO.	$\frac{x}{L}$	FULL SCALE			MODEL SCALE			ϕ	SKIN THICK- NESS	REMARKS
		x_0	y	z	x FROM NOSE	y	z			
1	0	238.00	0	--	0	0	--	0	.034	BOTTOM $\frac{1}{2}$
2	.005	244.45	▲	▲	.113	▲	▲	▲	.035	▲
3	.010	250.90			.226				.035	
4	.020	263.81			.452				.032	
5	.030	276.71			.677				.033	
6	.040	289.61			.903				.034	
7	.050	302.52			1.129				.033	
8	.060	315.42			1.355				.032	
9	.070	328.32			1.581				.034	
10	.080	341.22			1.806				.035	
11	.090	354.13			2.032				.035	▼
12	.100	367.03			2.258				.034	BOTTOM $\frac{1}{2}$
13									—	OPEN
14	.120	392.84			2.710				.035	BOTTOM $\frac{1}{2}$
15	.130	405.74			2.935				.035	▲
16	.140	418.64			3.161				.035	
17	.150	431.54			3.387				.034	
18	.160	444.45			3.613				.035	
19	.170	457.35			3.839				.035	
20	.180	470.25			4.064				.035	
21	.190	483.16			4.290				.035	
22	.200	496.06			4.516				.031	
23	.225	528.32			5.081				.031	
24	.250	560.58			5.645				.033	
25	.275	592.83			6.210				.033	
26	.300	625.09			6.774				.032	
27	.325	657.35			7.339				.033	
28	.350	689.60			7.903				.020	
29	.375	721.86			8.468				.028	
30	.400	754.12			9.032				.033	
31	.425	786.38	▼	▼	9.597	▼	▼	▼	.035	▼
32	.450	818.64	0	--	10.161	0	--	0	.034	BOTTOM $\frac{1}{2}$

Table IV. (Cont'd) Orbiter

T/C NO.	$\frac{x}{L}$	FULL SCALE			MODEL SCALE			ϕ	SKIN THICK- NESS	REMARKS
		x_0	y	z	(x FROM NOSE)	y	z			
33	.475	850.89	0	--	10.726	0	--	0	.030	BOTTOM ϕ
34	.500	883.15	↑	↑	11.290	↑	↑	↑	.030	↑
35	.525	915.41			11.855				.032	
36	.550	947.66			12.419				.031	
37	.575	979.92			12.984				.029	
38	.600	1012.18			13.548				.028	
39	.625	1044.44			14.113				.028	
40	.650	1076.70			14.677				.033	
41	.675	1108.95			15.242				.035	
42	.700	1141.21			15.806				.034	
43	.725	1173.47			16.371				.035	
44	.750	1205.72			16.935				.035	
45	.775	1237.98			17.500				.034	
46	.800	1270.24			18.064				.035	
47	.825	1302.50			18.624				.035	
48	.850	1334.76			19.193				.033	
49	.875	1367.01			19.758				.033	
50	.900	1399.27			20.322				.034	
51	.925	1431.53			20.887				.035	
52	.950	1463.78			21.451				.032	↓
53	.975	1496.04			22.016				.032	BOTTOM ϕ
54	1.000	1528.30			22.580				.029	$\frac{x}{L} = 1.000, \delta_{10^\circ} = 10^\circ$.033
55	1.025	1560.56			22.812				.032	$\delta_{EF} 10^\circ$ ONLY ↑
56	1.050	1592.82			23.145				.032	EF ↑
57	1.075	1625.08			23.385			↓	.032	$\delta_{EF} 10^\circ$ ONLY ↓
58	1.050	1592.82			23.707			0	.030	↓ .032
59	.010	250.90			.226			180	.035	TOP ϕ
60	.025	271.24			.565			↑	.035	↑
61	.050	302.58			1.129			↑	.035	↑
62	.075	334.92			1.694			↑	.033	↑
63	.100	367.26	↓	↓	2.258	↓	↓	↓	.033	↓
64	.125	399.60	0	--	2.823	0	--	180	.031	TOP ϕ

Table IV. (Cont'd) Orbiter

T/C NO.	$\frac{x}{L}$	FULL SCALE			MODEL SCALE			ϕ	SKIN THICKNESS	REMARKS
		x_0	y	z	x FROM NOSE	y	z			
65	.150	431.54	0	--	3.387	0	--	180	.026	TOP Q
66	.160	444.45	↑	↑	3.613	↑	↑	↑	.031	↑
67	.170	457.35	↑	↑	3.839	↑	↑	↑	.031	↑
68	.180	470.25	↑	↑	4.064	↑	↑	↑	.030	↑
69	.200	496.06	↑	↑	4.516	↑	↑	↑	.033	↑
70	.250	560.58	↑	↑	5.645	↑	↑	↑	.030	↑
71	.300	625.09	↑	↑	6.774	↑	↑	↑	.030	↑
72	.400	754.12	↑	↑	9.032	↑	↑	↑	.030	↑
73	.500	883.15	↑	↑	11.290	↑	↑	↑	.030	↑
74	.600	1012.18	↑	↑	13.548	↑	↑	↑	.031	↑
75	.700	1141.21	↓	↓	15.806	↓	↓	↓	.032	↓
76	.800	1270.24	0	--	18.064	0	--	180	.030	TOP Q
77			29.60	478.00	WINDOW #1	0.518	8.365	--	.035	TOP LEFT
78			12.80	478.00	WINDOW #1	0.224	8.365	--	.035	TOP RIGHT
79			21.20	464.97	↑	0.371	8.137	↑	.033	CENTER
80			34.40	452.00	↓	0.602	7.910	↓	.035	BOTTOM LEFT
81			6.00	452.00	WINDOW #1	0.105	7.910	↑	.034	BOTTOM RIGHT
82			43.20	478.00	WINDOW #2	0.756	8.365	↑	.035	TOP LEFT
83			34.80	478.00	WINDOW #2	0.609	8.365	↑	.035	TOP RIGHT
84			44.80	464.97	↑	0.784	8.137	↓	.035	CENTER
85			59.20	452.00	↓	1.036	7.910	↓	.035	BOTTOM LEFT
86			40.40	452.00	WINDOW #2	0.707	7.910	--	.035	BOTTOM RIGHT
87			62.40	464.97	WINDOW #3	1.092	8.137	140	.032	CENTER
88	.100	367.03	20.00	--	2.258	0.350	--	10	.035	FRONT BOTTOM SURFACE
89	.150	431.54	24.00	--	3.387	0.420	--	10	.035	↑
90	.050	302.52	25.00	↑	1.129	0.438	--	14	.033	↑
91	.200	496.06	25.00	↑	4.516	0.438	↑	11.5	.031	↑
92	.300	625.09	25.00	↑	6.774	0.438	↑	12	.033	↑
93	.20	496.06	25.00	↑	4.516	0.438	↑	21	.034	↑
94	.300	625.09	50.00	↓	6.774	0.875	↓	23	.036	↓
95	.400	754.12	50.00	↓	9.032	0.875	↓	21.5	.026	↓
96	.500	883.15	50.00	--	11.290	0.875	--	21.5	.026	FRONT BOTTOM SURFACE

Table IV. (Cont'd) Orator

T/C NO.	$\frac{x}{L}$	FULL SCALE			MODEL SCALE			ϕ	SKIN THICKNESS	REMARKS
		x_o	y	z	x FROM NOSE	y	z			
97	.600	1012.18	50.00		13.548	0.875		21.5	.021	WHEELWHEEL SIDE
98	.700	1141.21	50.00		15.806	0.875		↑	.033	
99	.800	1270.24	50.00		18.064	0.875		↓	.033	
100	.900	1399.27	50.00		20.322	0.875		21.5	.034	WHEELWHEEL SIDE
101	1.000	1528.30	100.00		22.580	1.75		39	.031	BODY FLAP $\frac{1}{10} = .034$
102	1.050	1582.82	100.00		23.704	1.75		39	.028	BODY FLAP $\frac{1}{12} = .033$
103	1.100	1637.34	39.20		2.258	0.686		20	.033	WHEELWHEEL SIDE
104	1.150	1691.86	40.80		3.387	0.714		20	.031	
105	.050	115.52		303.60	1.129	--	5.313	22	.031	C.C.L. TANGENT
106	.100	367.03	52.00	--	2.253	0.910		24.5	.033	↑
107	.150	477.54	62.00	--	3.387	1.085	--	25.5	.031	↓
108	.200	496.08	65.60	287.20	4.516	1.148	5.026	21.5	.035	C.C.L. TANGENT
109	.250	627.59	74.40	--	6.774	1.303		34	.033	
110	.300	447.08	75.00	292.90	4.516	1.323	5.110	35	.030	
111	.350	411.08	79.20	304.80	3.387	1.346	5.334	40	.030	
112	.400	407.08	85.20	298.80	4.516	1.491	5.229	40	.034	
113	.450	675.09	91.40		6.774	1.600		40	.026	
114	.500	675.09	102.80		6.774	1.800		45	.023	
115	.550	112.02		325.60	1.129		5.698	35	.030	M.H.B. TANGENT
116	.600			317.60	2.258		5.558	39	.030	M.H.B. TANGENT
117	.650	477.54	93.00	314.4	3.387	1.463	5.502	45.5	.030	M.H.B. TANGENT
118	.700	477.54		310.00	4.516		5.660	51	.030	
119	.750	675.09		330.00	6.774		5.775	57.5	.021	
120	.800	675.09		340.00	6.774		5.950	61	.027	
121	.075	100.01		350.00	1.724		6.125	--	.030	RCS CENTER
122	.10	675.09		350.00	6.774		6.125	65	.026	
123	.15	675.09		350.00	18.064		6.125	65	.027	
124	.20	675.09		350.00	20.322		6.125	65	.033	
125	.25						6.125	65	.034	
126	.30	100.01		350.00	22.580		6.250	65.5	.030	
127	.35				1.129		6.250	65	.030	↓

Table IV. (Cont'd) Orbiter

T/C NO.	$\frac{x}{L}$	FULL SCALE			MODEL SCALE			ϕ	SKIN THICK- NESS	REMARKS
		x_0	y	z	x FROM NOSE	y	z			
128	.200	496.06	--	360.00	4.516	--	6.300	67.5	.076	FUSELAGE SIDE
129	.300	625.09	--	360.00	6.774		6.300	70	.023	↑
130	.600	1012.18		375.14	13.548		6.565	77	.031	
131	.050	302.52		378.40	1.129		6.622	60	.035	45° TANGENT
132	.100	367.03		410.00	2.258		7.175	119	.034	↓
133	.200	496.06		410.00	4.516		7.175	96.5	.028	
134	.300	625.09		430.00	6.774		7.525	106	.032	FUSELAGE SIDE
135	.400	754.12		430.00	9.032		↑	105	.033	UPPER BODY
136	.500	883.15		430.00	11.290		↑	↑	.032	↑
137	.600	1012.18		430.00	13.548		↓	↓	.032	
138	.700	1141.21		430.00	15.806		↓	↓	.032	
139	.800	1270.24		430.00	18.064		7.525		.032	
140	.900	1399.27		370.00	20.322		6.475		.033	
141	.300	625.09		478.80	6.774		8.379	135	.031	
142	.400	754.12			9.032			135	.030	
143	.500	883.15			11.290			135	.033	
144	.600	1012.18			13.548			135	.033	
145	.700	1141.21			15.806			135	.032	
146	.600	1012.18		445.0	13.548		7.788	113	.032	
147	.600	1012.18		440.0	13.548		7.70	112	.032	
148	.750	1205.73		450.00	15.806		7.875	116	.032	↓
149	.750	1502.73		490.00	15.806		8.575	149	.034	UPPER BODY
150	.400	754.12			9.032			59.5	.031	WING UPPER CREASE
151	.500	883.15			11.290			63	.012	↑
152	.600	1012.18			13.548			65.5	.030	
153	.700	1141.21			15.806			64	.030	↓
154	.900	1399.27		222.0	20.322				.034	WING UPPER CREASE

Table IV. (Continued) Orbiter

T/C NO.	$\frac{2y}{b}$	$\frac{x}{c}$	FULL SCALE		MODEL SCALE		SKIN THICKNESS	REMARKS
			x_0	y	x_0	y		
155	.250	.025	640.650	117.085	7.043	2.049	.031	WING BOTTOM
156	▲	.153	754.120	▲	9.030	▲	.035	SURFACE
157	▼	.200	883.150	▲	11.288	▲	.028	▲
158	▼	.444	1011.180	▼	13.545	▼	.023	
159	▼	.500	1141.190	▼	15.802	▼	.034	
160	▼	.736	1271.230	▼	18.060	▼	.034	
161	.250	.900	1415.000	117.085	20.313	2.049	.034	
162	.301		754.000		9.030		.023	30° ROLL DOWN
163	.388		883.000		11.288		.028	30° ROLL DOWN
164	.400	.025	1141.000	187.336	13.504	3.278	.035	
165	▲	.100	1030.000	▲	14.900	▲	.034	
166	▲	.200	1030.000	▲	14.900	▲	.034	
167	▲	.302	1141.110	▲	15.802	▲	.035	
168	▲	.559	1271.230	▲	18.060	▲	.032	
169	▼	.700	1441.750	▼	19.307	▼	.032	
170	.400	.900	1441.750	187.336	21.065	3.278	.032	FLEVON
171	.500		1007.470	234.170	14.516	4.098	.033	30° ROLL DOWN
172	▲	.025	1077.913	▲	14.696	▲	.035	
173	▲	.137	1141.210	▲	15.802	▲	.030	
174	▲	.200	1191.450	▲	16.796	▲	.031	
175	▲	.307	1271.230	▲	18.060	▲	.034	
176	▲	.400	1311.410	▲	18.895	▲	.034	
177	▲	.500	1351.420	▲	19.518	▲	.033	
178	▼	.600	1441.750	▼	21.075	▼	.033	FLEVON
179	.600	.100	1141.110	281.004	15.095	4.918	.033	
180	▲	.200	1191.450	▲	16.025	▲	.031	
181	▲	.300	1271.230	▲	17.755	▲	.026	
182	▲	.400	1311.410	▲	18.064	▲	.026	
183	▼	.600	1441.750	▼	19.145	▼	.027	WING BOTTOM
184	.600	.700		21.065	19.145	4.918	.024	SURFACE

Table IV. (Continued)

T/C NO.	$\frac{2y}{b}$	$\frac{x}{c}$	FULL SCALE		MODEL SCALE		SKIN THICKNESS	REMARKS
			x_0	y	x (FROM NOSE)	y		
185	.600	.800	1404.000	281.004	20.404	4.918	.035	
186	.600	.850	1422.000	↑	20.720		.033	UPPER SURFACE
187	.600	.900	1440.000	281.004	21.034		.034	FLIGHT ↑
188	.750		1185.5	351.255	16.599	6.147	.035	L.E. ROUNDED
189	↑	.025	1193.428	↑	16.720	↑	.035	DOWN 30°
190		.100	1214.228		17.084		.032	
191		.303	1270.230		18.064		.032	
192		.500	1325.028		19.023		.032	
193		.700	1380.400		19.992		.027	
194		.800	1408.100		20.476		.031	
195	↓	.850	1422.000	↓	20.719	↓	.035	
196	.750	.900	1435.400	351.255	20.962	6.147	.035	
197	.850	.100	1255.200	398.089	17.201	6.967	.031	
198	.850	.300	1299.600	398.089	18.578	6.967	.034	
199	.850	.500	1344.000	398.089	19.355	6.967	.032	
200	.900	.60	1373.028	421.506	19.863	7.376	.024	
201	.900	.30	1314.743	421.506	18.846	7.376	.030	
202	.950			444.857		7.785	.035	L.E. RELIEF 30°
203	↑	.010	1299.925	↑	19.514	↑	.035	
204		.100	1303.828		19.652		.035	
205		.300	1335.543		19.707		.024	
206		.500	1367.257		19.762		.022	
207	↓	.700	1398.950		20.316	↓	.035	
208	.950	.900	1430.650	↓	20.870	7.785	.030	
209	.966	0.00	1307.000	452.416	18.708	7.917	.032	L.E.
210	.993	0.00	1398.950	464.914	20.316	8.130	.031	L.E.
211	.600			281.004		4.918	.035	
212	↑			↑			.035	
213	↓			↓			.035	
214	.600			281.004		4.918	.035	WING BOTTOM

Table IV. (Continued) Orbiter

T/C NO.	$\frac{2y}{b}$	$\frac{x}{c}$	FULL SCALE		MODEL SCALE		SKIN THICKNESS	REMARKS
			x_0	y	x (FROM NOSE)	y		
215	.600			281.004		4.918	.035	CLUSTER B SEE FIG. 6
216	.600			281.004		4.918	.035	
217	.600			281.004		4.918	.035	
218	.850			398.089		6.967	.020	CLUSTER C SEE FIG. 6
219	↑			↑		↑	.020	↑
220	↑			↑		↑	.020	
221	↑			↑		↑	.020	
222	↑			↑		↑	.020	
223	↓			↓		↓	.020	
224	.850			398.089		6.967	.020	↓
225	.400	.050	1015.114	187.336	13.599	3.278	.025	WING TOP SURFACE
226	↑	.200	1090.428	↑	14.918	↑	.024	↑
227	↓	.600	1291.171	↓		↓	.033	
228	.400	.950	1466.875	187.336		3.278	.031	ELEVON
229	.600	.050	1134.886	281.004	15.696	4.918	.032	
230	.600	.200	1188.657	↑	16.637	↑	.031	
231	.600	.600	1332.028	↑	19.146	↑	.0	
232	↑	.300	1404.000	↓	20.404	↓	.032	ELEVON
233	↓	.900	1440.000	↓	21.034	↓	.034	↑
234		.950	1458.000	281.004	21.349	4.918	.033	↓
235		.050	1223.057	374.672	17.239	6.557	.033	
236	↑	.200	1260.257	↑	17.889	↑	.033	
237		.600	1359.514	↑	19.627	↑	.032	
238	↓	.800	1408.780	↓	20.488	↓	.030	ELEVON
239	↓	.900	1433.690	↓	20.924	↓	.030	ELEVON
240	.850	.950	1446.145	374.672	21.192	6.557	.030	ELEVON

Table IV. (Continued)

Orbiter

T/C NO.	x [FULL SCALE			MODEL SCALE			ϕ	SKIN THICKNESS	REMARKS
		x_0	y	z	x (FROM NOSE)	y	z			
241	.829	1307			18.715				.026	BOTTOM CHASE OF CMS
242	.900	1399.27			20.318				.035	BOTTOM CHASE OF CMS
243	.975	1491.04			22.011				.030	BOTTOM CHASE OF CMS
244	1.000	1528.3			22.575				.034	BOTTOM OF RCS
245	1.014	1547.0			22.902				.035	BOTTOM OF RCS
246	.780	1245	95.0	474.0	17.608	1.662	8.295	127.9	.032	CMS POLE
247	.805	1276	112.9	474.0	18.173	1.976	8.295	123.8	.031	↑
248	.829	1307	124.5	474.0	18.715	2.179	8.295	120.8	.031	
249	.862	1350	132.6	↑	19.460	2.320	8.295	119.1	.035	
250	.963	1480	142.5	↓	21.740	2.494	8.295	117.5	.028	
251	1.000	1528.3	142.5	↓	22.575	2.494	8.295	117.5	.033	
252	1.014	1547.0		474.0	22.902		8.295		.033	
253	.805	1276	105.5	488	18.173	1.846	8.540	129.5	.032	
254	.829	1307	117.0	498.7	18.715	2.048	8.727	130.0	.033	
255	.862	1350	126.5	506	19.460	2.214	8.855	130.0	.031	
256	.963	1480	134.5	513	21.740	2.354	8.978	130.0	.028	
257	1.000	1528.3		500	22.575		8.750		.031	
258	1.014	1547.0		500	22.902		8.750		.032	
259	.805	1276	95.0	494.3	18.173	1.662	8.650	135.0	.033	
260	.829	1307	95.0	511.0	18.715	1.662	8.942	139.0	.034	
261	.862	1350	95.0	521.0	19.460	1.662	9.118	142.1	.031	
262	.963	1480	95.0	530.0	21.740	1.662	9.275	144.0	.027	
263	.862	1350	65	517.5	19.460	1.138	9.056	151.2	.031	↓
264	.963	1480	65	527.0	21.740	1.138	9.222	153	.026	CMS POLE

Table IV. (Continued) Orbiter

T/C NO.	$\frac{z}{b_v}$	$\frac{x}{c}$	FULL SCALE		MODEL SCALE		SKIN THICKNESS	REMARKS
			x_0	z	x (FROM NOSE)	z		
265	.159	.100	1353.00	550.20	19.513	9.628	.030	VERTICAL TAIL
266	▲	.300	1448.66	550.20	20.361	9.628	.030	▲
267	▼	.700	1448.66	550.20	22.062	9.628	.028	
268	.299	0.00		594.40		10.402	.033	L.E.
269	▲	.100	1394.94	▲	20.246	▲	.031	
270		.300	1439.00	▲	21.018	▲	.031	
271		.500	1483.06	▲	21.789	▲	.031	
272	▼	.700	1527.11	▼	22.559	▼	.022	
273	.299	.900	1571.17	594.40	23.330	10.402	.022	
274	.532	0.00		667.96		11.689	.034	L.E.
275	▲	.100	1538.31	▲	22.755	▲	.031	
276		.300	1574.94	▲	23.396	▲	.032	
277		.500	1611.57	▲	25.024	▲	.032	
278	▼	.700	1648.14	▼	24.677	▼	.023	
279	.532	.900	1684.77	667.96	25.318	11.689	.026	
280	.765	0.00		741.53		12.977	.034	L.E.
281	.765	.100	1461.00	▲	21.403	▲	.031	
282	▲	.300	1490.14	▲	21.912	▲	.031	
283		.500	1519.29	▲	22.423	▲	.030	
284	▼	.700	1548.43	▼	22.933	▼	.024	
285	.765	.900	1577.57	741.53	23.442	12.977	.024	
286	.905	0.00		785.73		13.750	.033	L.E.
287	.905	.100	1576.11	785.73	23.424	13.750	.030	▼
288	.905	.500	1625.80	785.73	24.288	13.750	.030	VERTICAL TAIL

Table IV. Orbiter Left Main Nozzle T/C Locations
Model 22-OTS

T/C NO.	x FROM EXIT PLANE		ϕ CLOCKWISE LOOKING FORWARD	
	F.S.	M.S.	SKIN THICKNESS	0° BOTTOM
301	5"	0.088	.031	0°
302	↓	↓	.031	25°
303	↓	↓	.031	45°
304	↓	↓	.031	65°
305	↓	↓	.031	90°
306	↓	↓	.031	135°
307	↓	↓	.031	315°
308	10"	0.175	.031	0°
309	↓	↓	.031	25°
310	↓	↓	.031	45°
311	↓	↓	.031	65°
312	↓	↓	.031	90°
313	15"	0.263	.031	0°
314	↓	↓	.031	45°
315	↓	↓	.031	90°
316	25"	0.438	.031	0°
317	↓	↓	.031	45°
318	↓	↓	.031	65°
319	↓	↓	.031	90°
320	45"	0.788	.031	45°
321			.032	BASE PLATE
322			.034	↓
323			.031	↓
324			.032	↓

Table IV. External Tank Locations

T/C NO.	x_T FS	x_{ms}^*	$\frac{x}{L}$	θ	SKIN THICKNESS	REMARKS
501	383.60	1.306	.040	0°	.034	NOSE
502	458.20	2.6110	.080	↑	.034	NOSE
503	588.75	4.896	.150	↑	.035	NOSE
504	1055.00	13.055	.400	↓	.035	
505	1428.00	19.582	.600	↓	.034	
506	1801.00	26.110	.800	0°	.035	
507	1055.00	13.055	.400	45°	.035	
508	1241.50	16.319	.500	↑	.035	
509	1428.00	19.582	.600	↑	.034	
510	1614.50	22.846	.700	↓	.034	
511	1801.00	26.110	.800	↓	.035	
512	1987.5	29.374	.900	45°	↑	
513	868.5	9.791	.300	67.5°	↑	
514	961.75	11.423	.350	↑	↓	
515	1055.00	13.055	.400		.035	
516	1241.50	16.319	.500		.034	
517	1428.00	19.582	.600		↑	
518	1521.25	21.214	.650		↓	
519	1614.50	22.846	.700		.034	
520	1707.75	24.478	.750		.035	
521	1801.00	26.110	.800	↓	↑	
522	1987.5	29.374	.900	67.5°		
523	682.00	6.528	.200	90°		
524	775.25	8.159	.250	↑		
525	821.88	8.975	.275			
526	868.50	9.791	.300		↓	
527	915.12	10.607	.325			
528	961.75	11.423	.350		.035	
529	1055.00	13.055	.400		.034	
530	1148.25	14.687	.450		.035	
531	1241.5	16.319	.500		.034	
532	1334.75	17.951	.550	↓	.035	
533	1428.00	19.582	.600	90°	.034	

*MEASURED FROM NOSE

Table IV. (Continued)
(External Tanks)

T/C NO.	x_T FS	x_{ms}^*	$\frac{x}{L}$	θ	SKIN THICKNESS	REMARKS
534	1521.25	21.214	.650	90°	.034	
535	1614.50	22.846	.700	↑	.034	
536	1707.75	24.478	.750	↑	.035	
537	1801.00	26.110	.800	↓	.035	
538	1894.25	27.742	.850	↓	.034	
539	1987.50	29.374	.900	90°		
540	2080.75	31.006	.950	112.5°	.035	
541	2174.00	32.638	.990	↑	↑	
542	915.12	10.607	.325	↑	↑	
543	961.75	11.423	.350		↓	
544	1055.00	13.055	.400		↓	
545	1148.25	14.687	.450		.035	
546	1241.50	16.319	.500		.034	
547	1334.75	17.951	.550		.035	
548	1428.00	19.582	.600		.034	
549	1521.25	21.214	.650		.034	
550	1614.50	22.846	.700		.034	
551	1707.75	24.478	.750		.035	
552	1801.00	26.110	.800	↓	↑	
553	1894.25	27.742	.850	↓	↓	
554	1987.50	29.374	.900	112.5°	.035	
555	1847.62	26.926	.825	123°	.034	
556	1894.25	27.742	.850	↑	.034	
557	1940.88	28.558	.875	↑	.034	
558	1987.50	29.374	.900	↓	.035	
559	2034.12	30.190	.925	↓	.035	
560	2099.40	31.332	.960	123°	.034	
561	915.12	10.607	.325	135°	.035	
562	961.75	11.423	.350	↑	↑	
563	1008.38	12.239	.375	↑	↓	
564	1055.00	13.055	.400		↓	
565	1148.25	14.687	.450		.035	
566	1241.50	16.319	.500		.034	
567	1334.75	17.951	.550		.035	
568	1428.00	19.582	.600	↓	.034	
569	1521.25	21.214	.650	135°	.034	

*MEASURED FROM NOSE

Table IV. (Continued)
(External Tank)

T/C NO.	x_T FS	x_{MS}^*	$\frac{x}{L}$	θ	SKIN THICKNESS	REMARKS
570	1614.50	22.846	.700	135°	.035	
571	1707.75	24.478	.750	↑	.034	
572	1801.00	26.110	.800	↓	.035	
573	1894.25	27.742	.850	↓	.034	
574	1987.50	29.374	.900	↓	.035	
575	2052.78	30.576	.935	135°		
576	1055.00	13.055	.400	151	.035	
577	1101.62	13.871	.425	157	↑	
578	1148.25	14.687	.450	↑	↓	
579	1194.88	15.503	.475		.035	
580	1241.50	16.319	.500		.034	
581	1334.75	17.951	.550		.035	
582	1428.00	19.582	.600		.034	
583	1521.25	21.214	.650		.034	
584	1614.50	22.846	.700		.035	
585	1707.75	24.478	.750		.035	
586	1801.00	26.110	.800		.035	
587	1894.25	27.742	.850	↓	.034	
588	1987.50	29.374	.900	157	.034	
589	1101.62	13.871	.425	161	.035	
590	1241.50	16.319	.500	165°	.034	
591	1414.50	21.846	.700	165°	.035	
592	1987.50	29.374	.900	165°	.034	
593	1055.00	13.055	.400	165°	.035	
594	309.00	0.000	0.000	180	.033	NOSE
595	318.32	0.163	.005	↑	.033	
596	327.65	0.326	.010	↑	.034	
597	382.60	1.306	.040	↓	.033	
598	458.20	2.611	.080	125°	.035	↓

*MEASURED FROM NOSE

Table IV. (CONTINUED)
(External Tank)

T/C NO.	x_T FS	x_{ms}^*	$\frac{x}{L}$	θ	SKIN THICKNESS	REMARKS
599	588.75	4.896	.150	180°	.035	
600	682.00	6.528	.200	↑	.034	
601	775.25	8.159	.250		.035	
602	868.50	9.791	.300		↑	
603	961.75	11.423	.350		↓	
604	1008.38	12.239	.375		.035	
605	1055.00	13.055	.400		.034	
606	1101.62	13.871	.425		↑	
607	1148.25	14.687	.450		↑	
608	1194.88	15.503	.475		↓	
609	1241.50	16.319	.500		.034	
610	1288.12	17.135	.525		.035	
611	1334.75	17.951	.550		.035	
612	1381.38	18.767	.575		.034	
613	1428.00	19.582	.600		↑	
614	1474.62	20.398	.625		↑	
615	1521.25	21.214	.650		↓	
616	1567.88	22.030	.675		↓	
617	1614.50	22.846	.700		.034	
618	1707.75	24.478	.750		.035	
619	1801.00	26.110	.800		.035	
620	1894.25	27.742	.850		.035	
621	1987.5	29.374	.900		.034	
622	2056.50	30.581	.937	↓	.034	
623	2127.38	31.822	.975	180°	.034	
624	458.20	2.611	.080	194°	.035	
625	587.75	4.896	.150	196°	.035	
626	868.50	9.791	.300	196°	.035	

*MEASURED FROM NOSE

Table VI. (Concluded)
(External Tank)

T/C NO.	x_T FS	x_{ms}^*	$\frac{x}{L}$	θ	SKIN THICKNESS	REMARKS
627	1241.50	16.319	.500	196°	.034	
628	1614.50	22.846	.700	196°	.034	
629	1987.50	29.374	.900	197°	.034	
630	588.75	4.896	.150	208°	.033	
631	1055.00	13.055	.400	↑	.034	
632	1428.00	19.582	.600	↓	.035	
633	1801.00	26.110	.800	↓	.035	
634	2056.50	30.581		208	.035	
635	1055.00	13.055	.400	216°	.034	
636	1241.50	16.319	.500	216°	.034	
637	1614.50	22.846	.700	216°	.034	
638	933.78	10.934	.335	222.5°	.036	
639	1055.00	13.055	.400	229°	.034	
640	1428.00	19.582	.600	229°	.035	
641	1801.00	26.110	.800	229°	.035	

*MEASURED FROM NOSE

TABLE V.
THERMOCOUPLE HOOKUP SCHEDULE

T/C Schedule 1

<u>Channel No.</u>	<u>T/C No.</u>	<u>Channel No.</u>	<u>T/C No.</u>	<u>Channel No.</u>	<u>T/C No.</u>
1	1	33	34	65	68
2	2	34	35	66	69
3	3	35	36	67	71
4	4	36	37	68	72
5	5	37	38	69	74
6	6	38	39	70	90
7	7	39	40	71	91
8	8	40	41	72	92
9	9	41	42	73	93
10	10	42	43	74	94
11	11	43	44	75	95
12	12	44	45	76	96
13	14	45	46	77	97
14	15	46	47	78	98
15	16	47	48	79	99
16	17	48	49	80	100
17	18	49	50	81	101
18	19	50	51	82	102
19	20	51	52	83	103
20	21	52	53	84	104
21	22	53	54	85	105
22	23	54	56	86	111
23	24	55	58	87	115
24	25	56	59	88	116
25	26	57	60	89	134
26	27	58	61	90	135
27	28	59	62	91	150
28	29	60	63	92	155
29	30	61	64	93	156
30	31	62	65	94	157
31	32	63	66	95	158
32	33	64	67	96	159
				97	160

TABLE V. - Continued.

THERMOCOUPLE HOOKUP SCHEDULE

T/C Schedule 2

Ch-n No.	T/C No.	Ch-n No.	T/C No.	Ch-n No.	T/C No.
1	161	33	193	65	229
2	162	34	194	66	230
3	163	35	195	67	233
4	164	36	196	68	234
5	165	37	197	69	246
6	166	38	198	70	247
7	167	39	199	71	248
8	168	40	200	72	249
9	169	41	201	73	271
10	170	42	202	74	275
11	171	43	203	75	276
12	172	44	204	76	280
13	173	45	205	77	281
14	174	46	206	78	232
15	175	47	207	79	285
16	176	48	208	80	286
17	177	49	209	81	288
18	178	50	210	82	501
19	179	51	211	83	502
20	180	52	212	84	503
21	181	53	213	85	504
22	182	54	214	86	505
23	183	55	215	87	506
24	184	56	216	88	507
25	185	57	217	89	508
26	186	58	218	90	509
27	187	59	219	91	510
28	188	60	220	92	511
29	189	61	221	93	512
30	190	62	222	94	513
31	191	63	223	95	514
32	192	64	224	96	516
				97	517

TABLE V. - Continued.

THERMOCOUPLE HOOKUP SCHEDULE

T/C Schedule 3

Chan No.	T/C No.	Chan No.	T/C No.	Chan No.	T/C No.
1	519	33	574	65	609
2	521	34	576	66	610
3	523	35	577	67	611
4	526	36	578	68	612
5	529	37	579	69	613
6	531	38	580	70	614
7	533	39	581	71	615
8	535	40	582	72	616
9	537	41	583	73	617
10	539	42	584	74	618
11	541	43	585	75	619
12	544	44	586	76	620
13	546	45	587	77	621
14	548	46	589	78	622
15	550	47	590	79	623
16	552	48	591	80	624
17	555	49	592	81	625
18	557	50	594	82	626
19	558	51	595	83	627
20	561	52	596	84	628
21	562	53	597	85	629
22	563	54	598	86	630
23	564	55	599	87	631
24	565	56	600	88	632
25	566	57	601	89	633
26	567	58	602	90	634
27	568	59	603	91	635
28	569	60	604	92	636
29	570	61	605	93	637
30	571	62	606	94	638
31	572	63	607	95	639
32	573	64	608	96	640
				97	641

TABLE V. - Continued.

THERMOCOUPLE HOOKUP SCHEDULE

T/C Schedule 1

Chn No	T/C No	Chn No	T/C No	Chn No	T/C No
1	77	33	34	65	68
2	78	34	35	66	69
3	79	35	36	67	71
4	80	36	37	68	72
5	81	37	38	69	71
6	82	38	39	70	90
7	83	39	40	71	91
8	84	40	41	72	92
9	85	41	42	73	93
10	86	42	43	74	94
11	87	43	44	75	95
12	12	44	45	76	96
13	14	45	46	77	97
14	15	46	47	78	98
15	16	47	48	79	99
16	17	48	49	80	100
17	18	49	50	81	101
18	19	50	51	82	102
19	20	51	52	83	103
20	21	52	53	84	104
21	22	53	54	85	105
22	23	54	56	86	111
23	24	55	58	87	115
24	25	56	59	88	116
25	26	57	60	89	134
26	27	58	61	90	135
27	28	59	62	91	150
28	29	60	63	92	155
29	30	61	64	93	156
30	31	62	65	94	157
31	32	63	66	95	158
32	33	64	67	96	159
				97	160

TABLE V. - Continued.

THERMOCOUPLE HOOKUP SCHEDULE

T/C Schedule 5

Chan No	T/C No	Chan No	T/C No	Chan No	T/C No
1	Open	33	Open	65	Open
2		34		66	
3		35		67	
4		36		68	
5		37		69	
6		38		70	
7		39		71	
8		40		72	
9		41		73	
10		42		74	
11		43		75	
12		44		76	
13		45		77	
14		46		78	
15		47		79	
16		48		80	
17		49		81	
18		50		82	501
19		51		83	502
20		52		84	503
21		53		85	504
22		54		86	505
23		55		87	506
24		56		88	507
25		57		89	508
26		58		90	509
27		59		91	510
28		60		92	511
29		61		93	512
30		62		94	513
31		63		95	514
32		64		96	515
				97	516

TABLE V. - Continued.

T/C Schedule 6THERMOCOUPLE HOOKUP SCHEDULE

<u>Chan No</u>	<u>T/C No</u>	<u>Chan No</u>	<u>T/C No</u>	<u>Chan No</u>	<u>T/C No</u>
1	59	33	110	65	142
2	60	34	111	66	143
3	61	35	112	67	144
4	62	36	113	68	145
5	63	37	114	69	146
6	64	38	115	70	147
7	65	39	116	71	148
8	66	40	117	72	149
9	67	41	118	73	150
10	68	42	119	74	151
11	69	43	120	75	152
12	70	44	121	76	153
13	71	45	122	77	154
14	72	46	123	78	155
15	73	47	124	79	156
16	74	48	125	80	157
17	75	49	126	81	158
18	76	50	127	82	159
19	88	51	128	83	160
20	89	52	129	84	161
21	90	53	130	85	162
22	91	54	131	86	163
23	92	55	132	87	164
24	101	56	133	88	165
25	102	57	134	89	166
26	103	58	135	90	167
27	104	59	136	91	168
28	105	60	137	92	169
29	106	61	138	93	170
30	107	62	139	94	171
31	108	63	140	95	172
32	109	64	141	96	173
				97	174

TABLE V. - Continued.

THERMOCOUPLE HOOKUP SCHEDULET/C Schedule 7

Chan No	T/C No	Chan No	T/C No	Chan No	T/C No
1	175	33	207	65	255
2	176	34	208	66	256
3	177	35	209	67	258
4	178	36	210	68	259
5	179	37	211	69	260
6	180	38	212	70	261
7	181	39	213	71	262
8	182	40	214	72	263
9	183	41	215	73	264
10	184	42	216	74	265
11	185	43	217	75	266
12	186	44	218	76	267
13	187	45	219	77	268
14	188	46	220	78	269
15	189	47	221	79	270
16	190	48	222	80	271
17	191	49	223	81	272
18	192	50	224	82	273
19	193	51	241	83	274
20	194	52	242	84	275
21	195	53	243	85	276
22	196	54	244	86	277
23	197	55	245	87	278
24	198	56	246	88	279
25	199	57	247	89	280
26	200	58	248	90	281
27	201	59	249	91	282
28	202	60	250	92	283
29	203	61	251	93	284
30	204	62	252	94	285
31	205	63	253	95	286
32	206	64	254	96	287
				97	288

TABLE V. - Continued.

THERMOCOUPLE HOOKUP SCHEDULE

T/C Schedule 8

Channel No.	T/C No.	Channel No.	T/C No.	Channel No.	T/C No.
1	1	33	34	65	84
2	2	34	35	66	85
3	3	35	36	67	86
4	4	36	37	68	87
5	5	37	38	69	93
6	6	38	39	70	94
7	7	39	40	71	95
8	8	40	41	72	96
9	9	41	42	73	97
10	10	42	43	74	98
11	11	43	44	75	99
12	12	44	45	76	100
13	14	45	46	77	225
14	15	46	47	78	226
15	16	47	48	79	227
16	17	48	49	80	228
17	18	49	50	81	229
18	19	50	51	82	230
19	20	51	52	83	231
20	21	52	53	84	232
21	22	53	54	85	233
22	23	54	55	86	234
23	24	55	56	87	235
24	25	56	57	88	236
25	26	57	58	89	237
26	27	58	77	90	238
27	28	59	78	91	239
28	29	60	79	92	240
29	30	61	80	93	Open
30	31	62	81	94	↑
31	32	63	82	95	↓
32	33	64	83	96	Open
				97	

TABLE V. - Continued.

THERMOCOUPLE HOOKUP SCHEDULE

T/C Schedule 9

<u>Channel No.</u>	<u>T/C No.</u>	<u>Channel No.</u>	<u>T/C No.</u>	<u>Channel No.</u>	<u>T/C No.</u>
1	301	33	9	65	42
2	302	34	10	66	43
3	303	35	11	67	44
4	304	36	12	68	45
5	305	37	14	69	46
6	306	38	15	70	47
7	307	39	16	71	48
8	308	40	17	72	49
9	309	41	18	73	50
10	310	42	19	74	51
11	311	43	20	75	52
12	312	44	21	76	53
13	313	45	22	77	54
14	314	46	23	78	56
15	315	47	24	79	58
16	316	48	25	80	93
17	317	49	26	81	94
18	318	50	27	82	95
19	319	51	28	83	96
20	319	52	29	84	97
21	321	53	30	85	98
22	322	54	31	86	99
23	323	55	32	87	100
24	324	56	33	88	91
25	1	57	34	89	108
26	2	58	35	90	110
27	3	59	36	91	112
28	4	60	37	92	92
29	5	61	38	93	109
30	6	62	39	94	113
31	7	63	40	95	114
32	8	64	41	96	Open
				97	Open

TABLE V. - Concluded.

THERMOCOUPLE HOOKUP SCHEDULE

T/C Schedule 10

Chan No	T/C No	Chan No	T/C No	Chan No	T/C No
1	155	33	187	65	219
2	156	34	188	66	220
3	157	35	189	67	221
4	158	36	190	68	222
5	159	37	191	69	223
6	160	38	192	70	224
7	161	39	193	71	Open
8	162	40	194	72	
9	163	41	195	73	
10	164	42	196	74	
11	165	43	197	75	
12	166	44	198	76	
13	167	45	199	77	
14	168	46	200	78	
15	169	47	201	79	
16	170	48	202	80	
17	171	49	203	81	
18	172	50	204	82	
19	173	51	205	83	
20	174	52	206	84	
21	175	53	207	85	
22	176	54	208	86	
23	177	55	209	87	
24	178	56	210	88	
25	179	57	211	89	
26	180	58	212	90	
27	181	59	213	91	
28	182	60	214	92	
29	183	61	215	93	
30	184	62	216	94	
31	185	63	217	95	
32	186	64	218	96	
				97	

$$L_0 = 1290.3 \text{ IN.}$$

$$L_T = 1865.0$$

$$b_v = 315.72$$

$$b/2 = 468.34$$

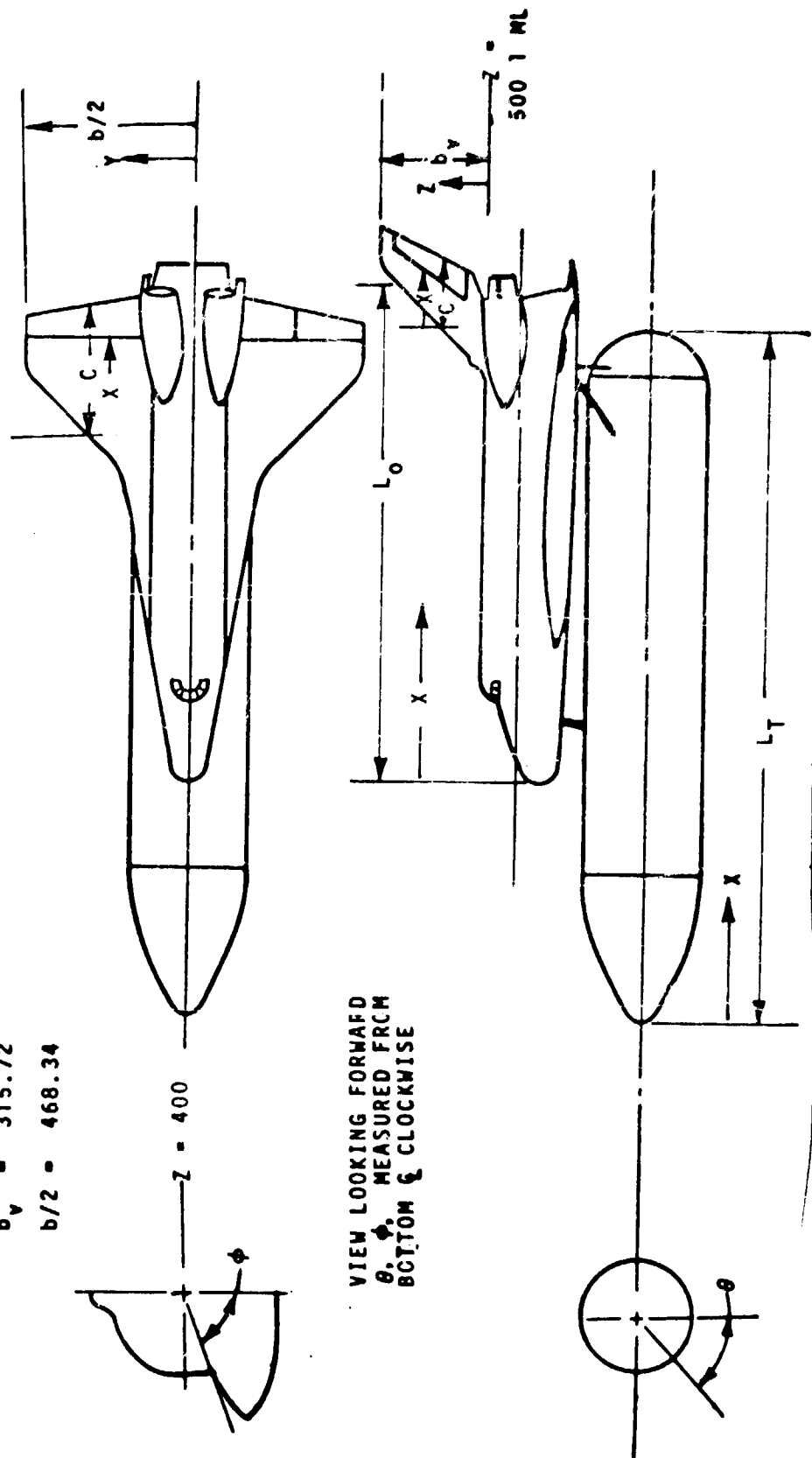
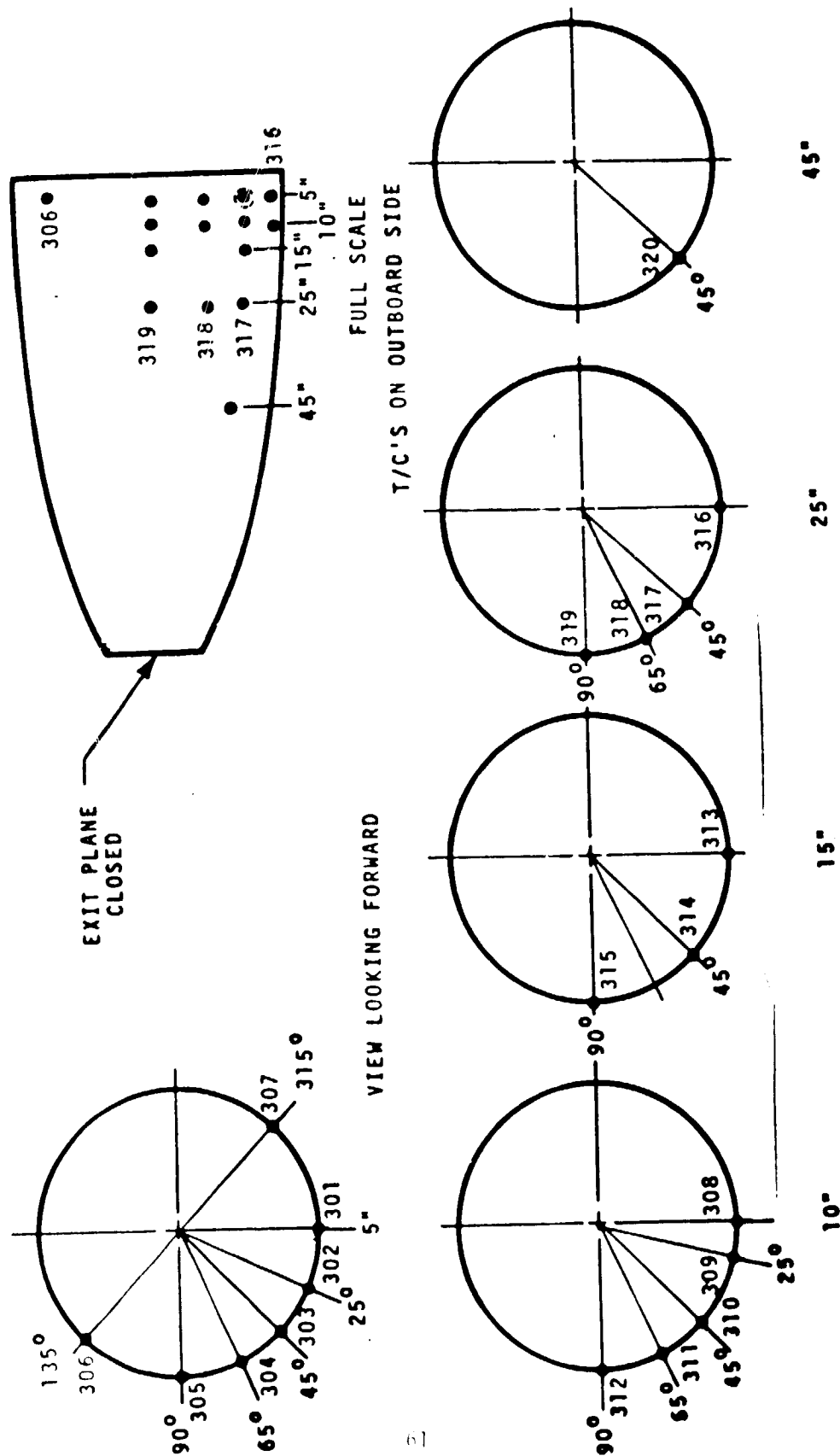
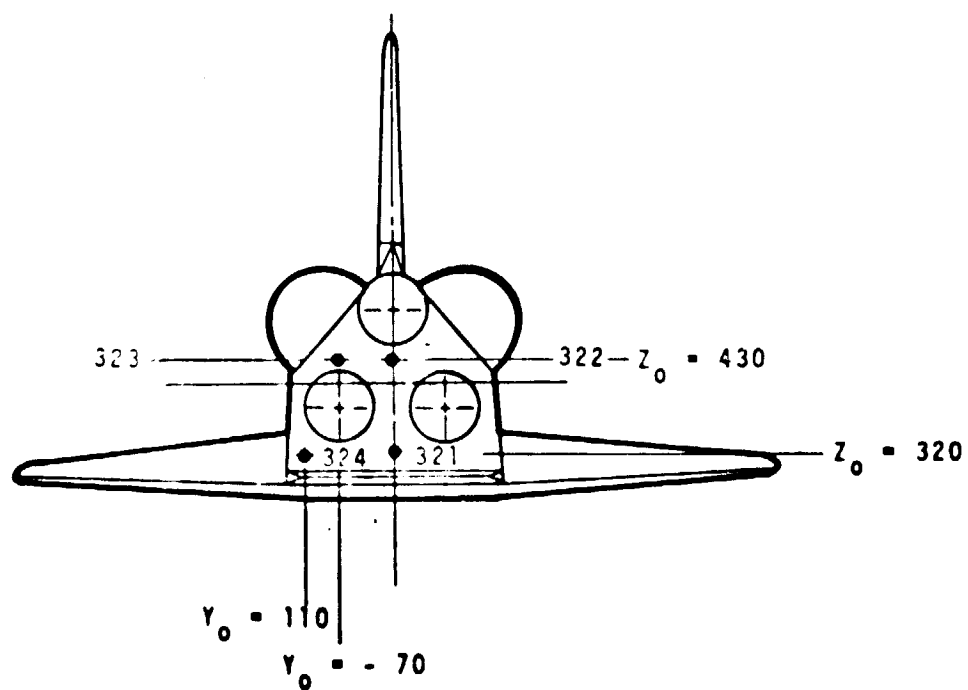


Figure 1. - Mode instrumentation reference system.



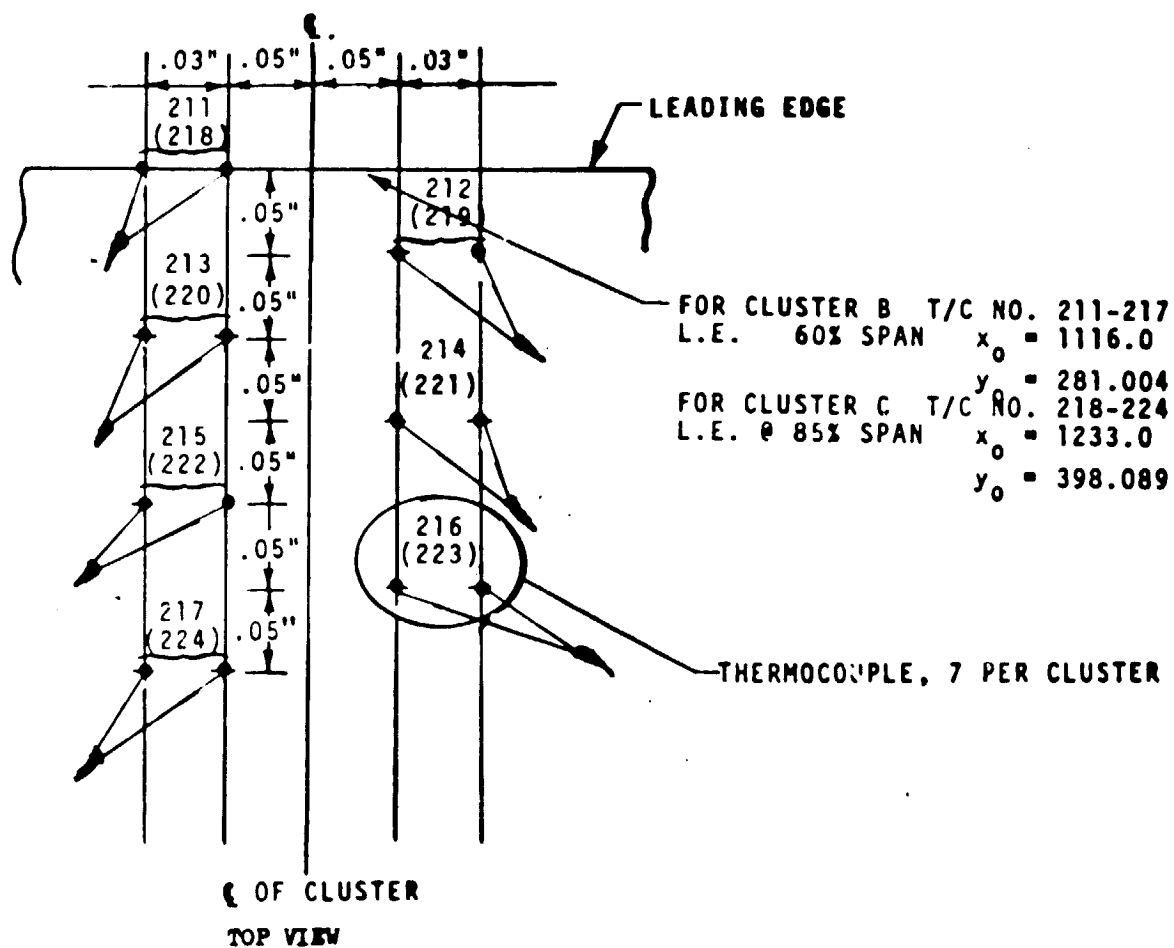
a. 22-OTS Instrumented nozzle

Figure 2. - Orbiter instrumentation.



b. Instrumented Nozzle Base Plate
Model 22-OTS

Figure 2. - Continued.



c. Wing Leading Edge Clusters B and C T/C Locations

Figure 2. - Continued.

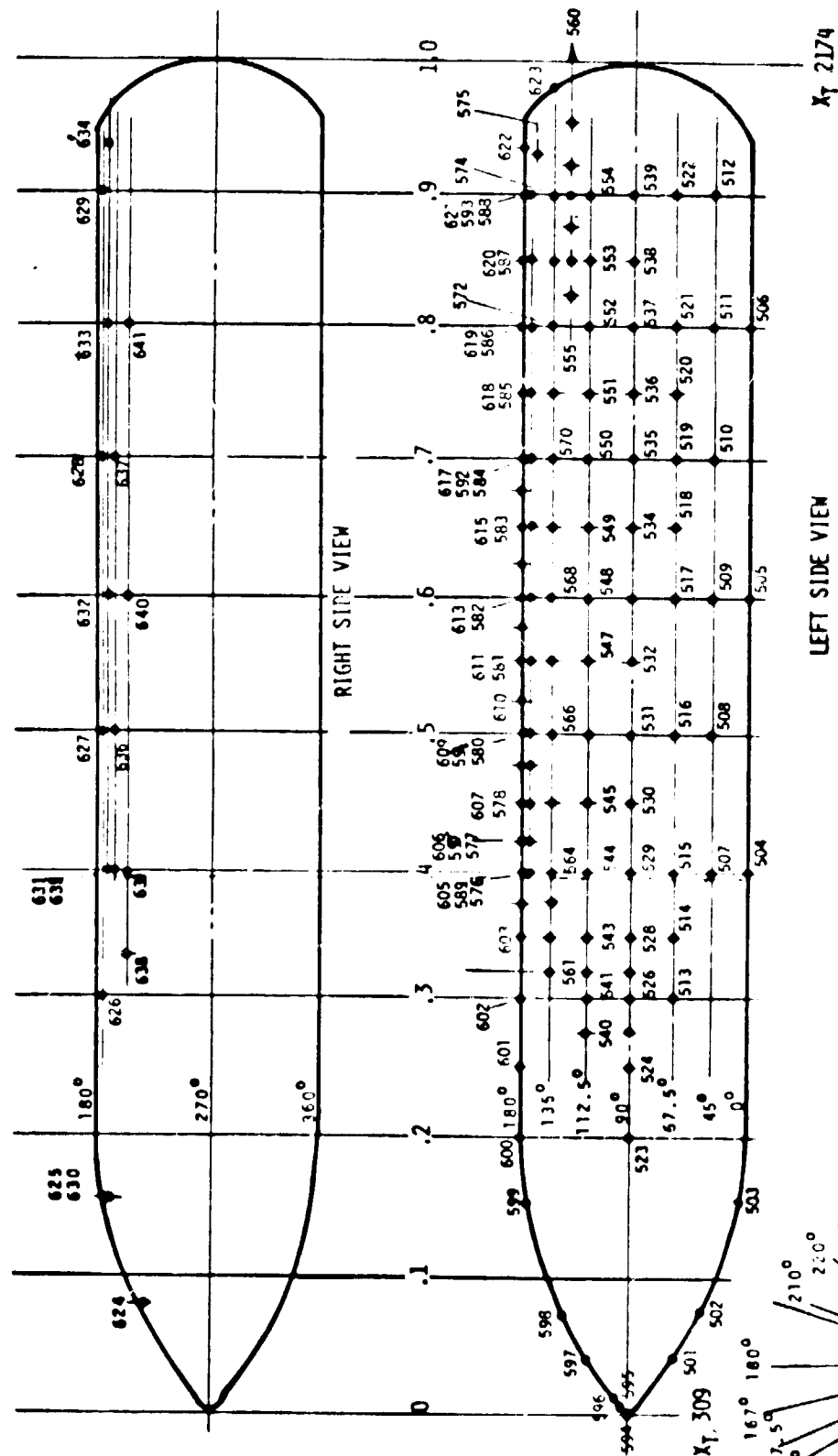
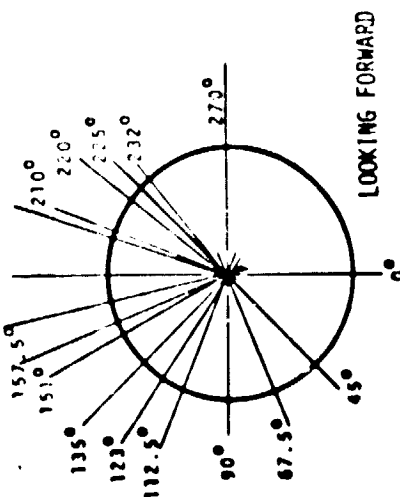
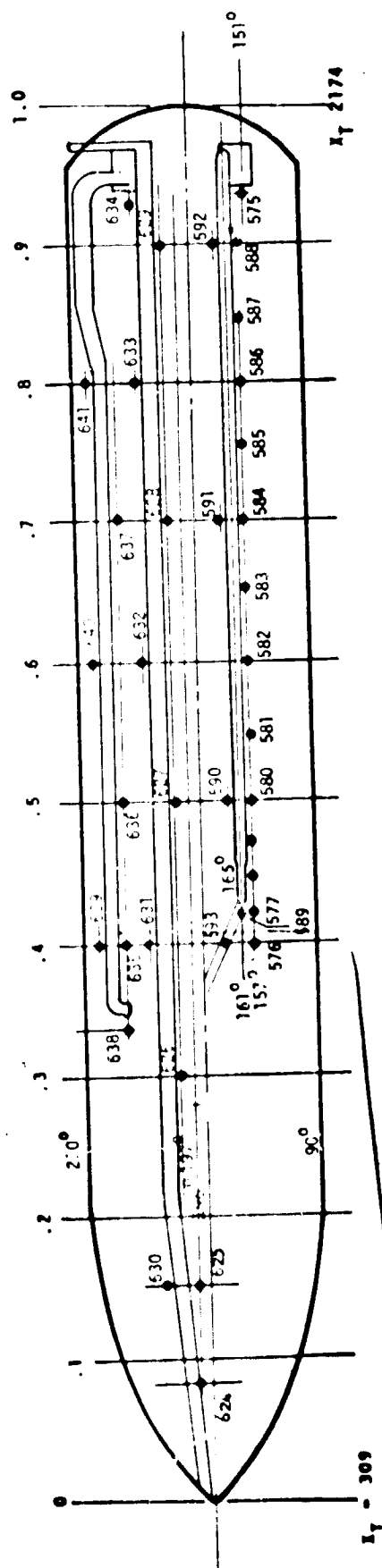


Figure 6 - Continued

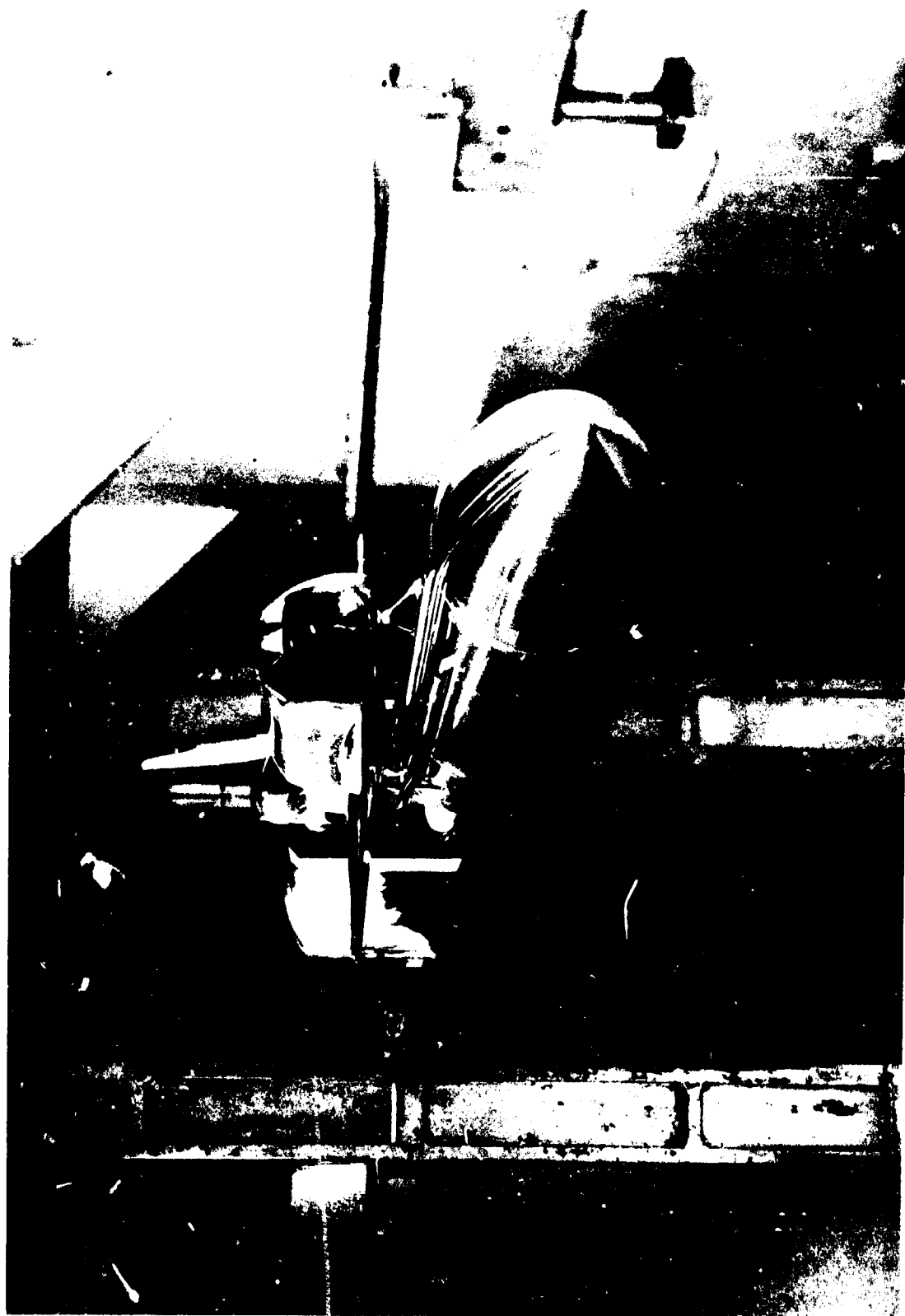
Figure 6 - Continued





e. External Tank T/C Locations (Locations around plumbing only) Top View

Figure 2. - Concluded.



a. Second Stage Configuration Front View

Figure 3. - Model photographs.



b. Second Stage Configuration Side View

Figure 3. - Continued.



c. Re-entry Nozzle Heating Installation

Figure 3. - Concluded.

DATA FIGURES

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HAW/HT	RN/L	BETA	ELEVON
(P)K101)	AECC VAS22 0-15 01+110 EXTERNAL TANK	1.000	3.720	.000	.000
(P)K101)	AECC VAS22 0-15 01+110 EXTERNAL TANK	.900	3.720	.000	.000
(P)K101)	AECC VAS22 0-15 01+110 EXTERNAL TANK	.850	3.720	.000	.000

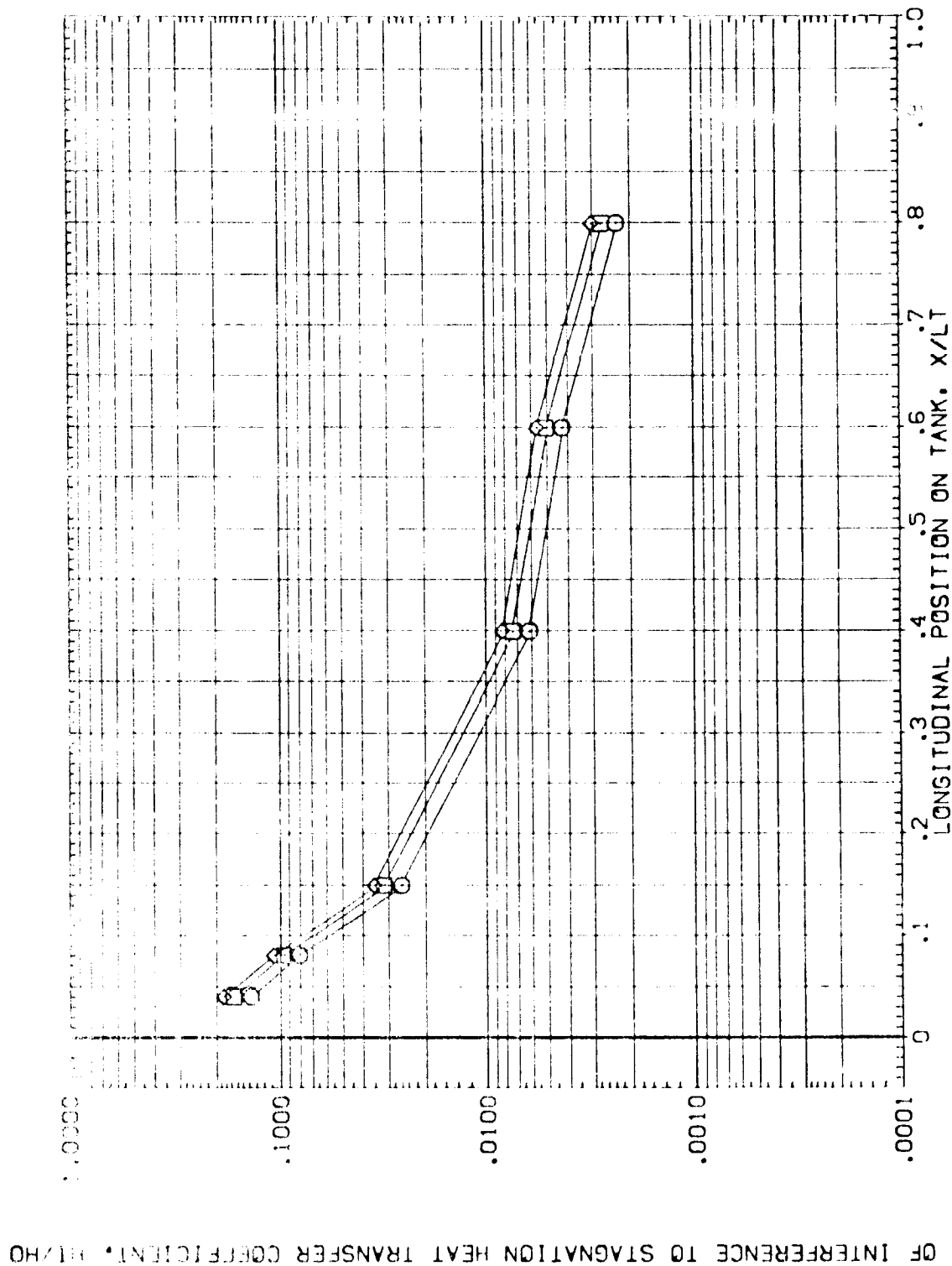


FIGURE 4 HEAT TRANSFER COEFFICIENTS ON EXTERNAL TANK.

$MACH = 8.000$ $ALPHA = .000$ $PHI = .000$

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HAV/HT	PAUL	BETA	ELEVON
(RTKTOI)	AEEDC VA352 01+110 EXTERNAL TANK	1.000	3.720	.000	.000
(ATKTOI)	AEEDC VA352 01+110 EXTERNAL TANK	.900	3.720	.000	.000
(BTkTOI)	AEEDC VA352 01+110 EXTERNAL TANK	.850	3.720	.000	.000

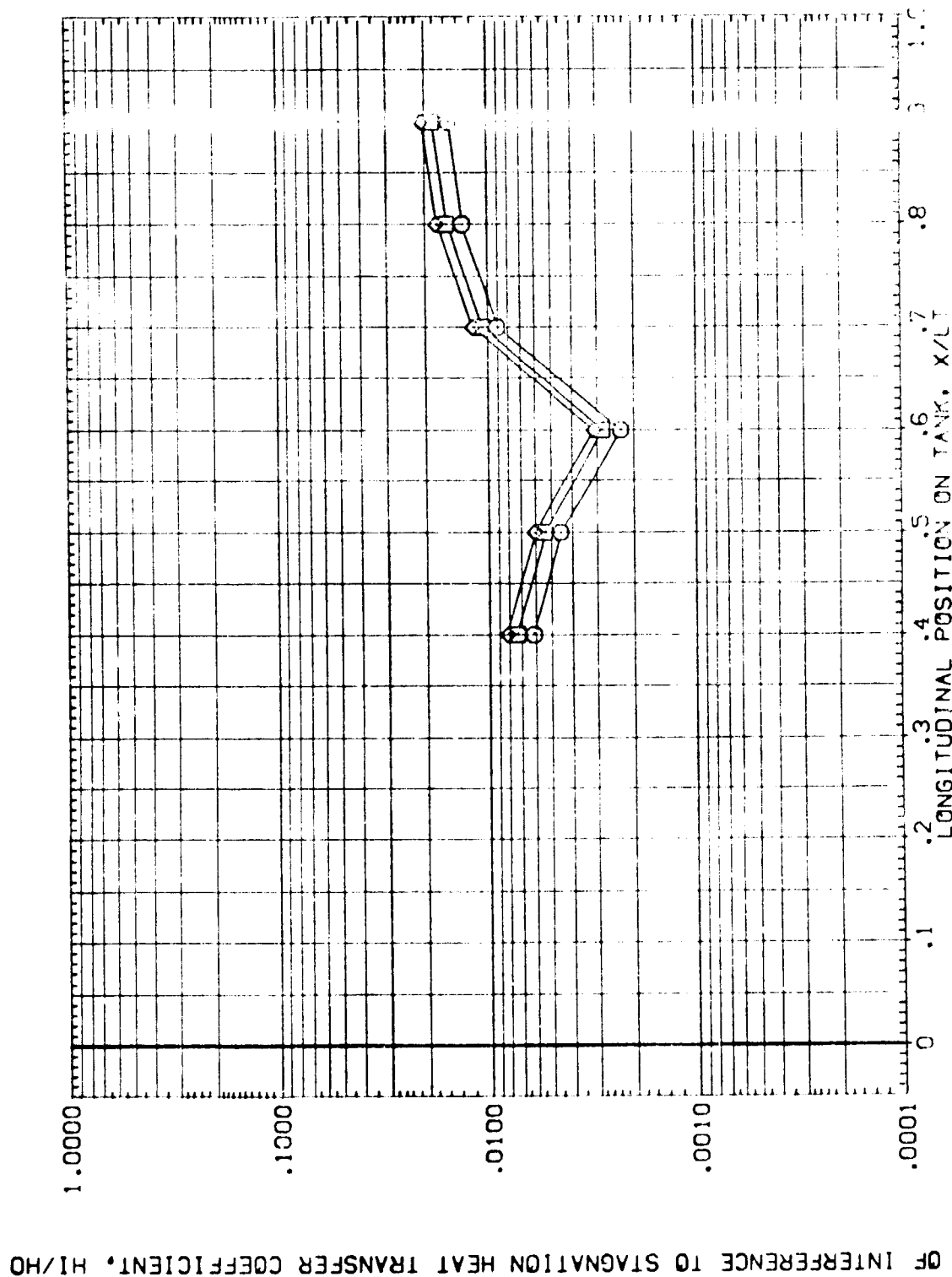


FIGURE 4 HEAT TRANSFER COEFFICIENTS ON EXTERNAL TANK.

MACH = 8.000 ALPHA = .000 PHI = 45.000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HAV/HT	RV/L	BETA	ELEVON
(RTKTOI)	AEDC VA352 0-48 01-T10 EXTERNAL TANK	1.000	3.720	.000	.000
(ATKTOI)	AEDC VA352 0-48 01-T10 EXTERNAL TANK	.900	3.720	.000	.000
(BTKTOI)	AEDC VA352 0-48 01-T10 EXTERNAL TANK	.850	3.720	.000	.000

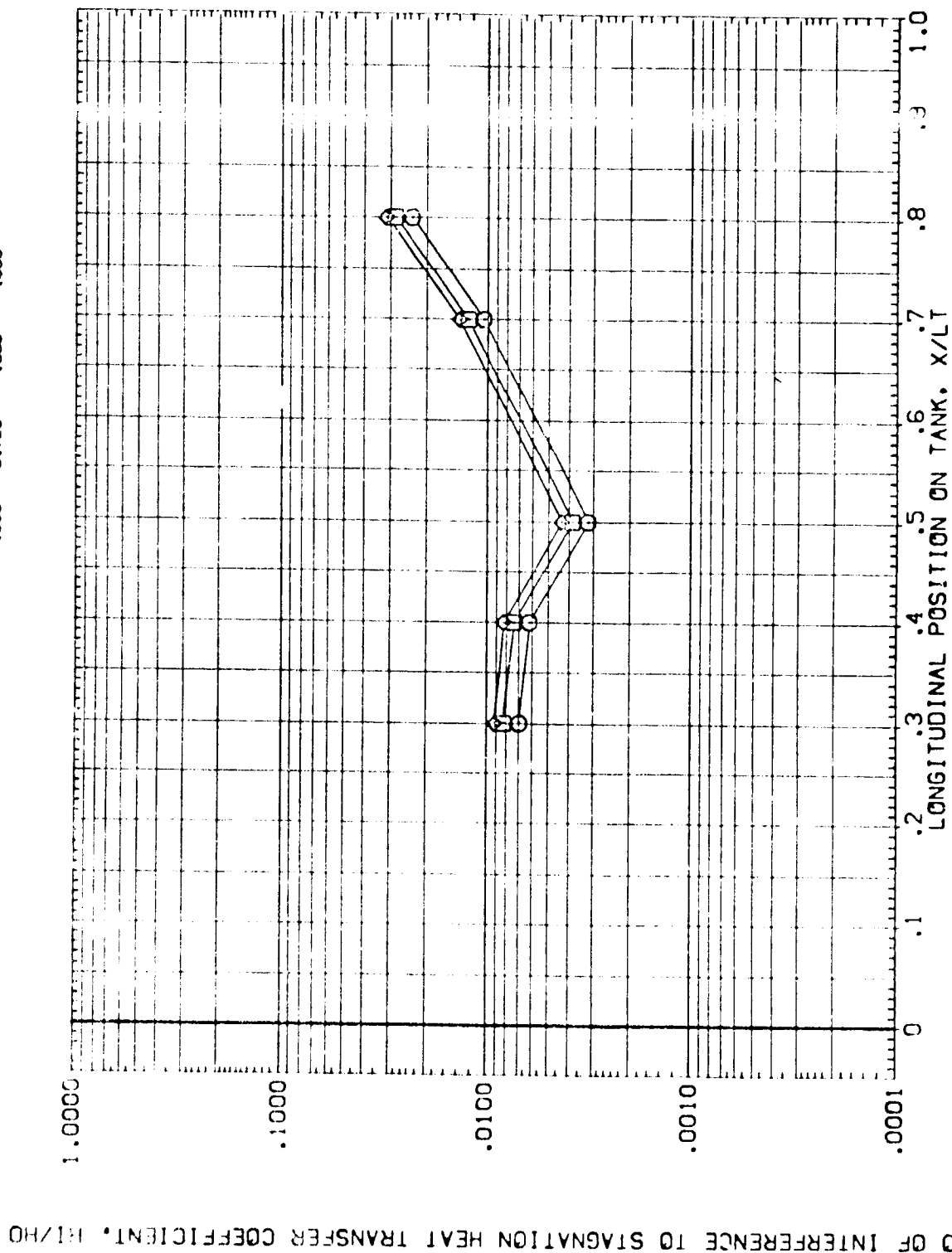


FIGURE 4 HEAT TRANSFER COEFFICIENTS ON EXTERNAL TANK.

MACH = 8.000 ALPHA = .000 PHI = 67.500

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HAU/HT	R ₀ /L	BETA	ELEVON
(RTKT01)	AEDC VA352 044B 01+110 EXTERNAL TANK	1.000	3.720	.000	.000
(ATKT01)	AEDC VA352 044B 01+110 EXTERNAL TANK	.900	3.720	.000	.000
(BTKT01)	AEDC VA352 044B 01+110 EXTERNAL TANK	.850	3.720	.000	.000

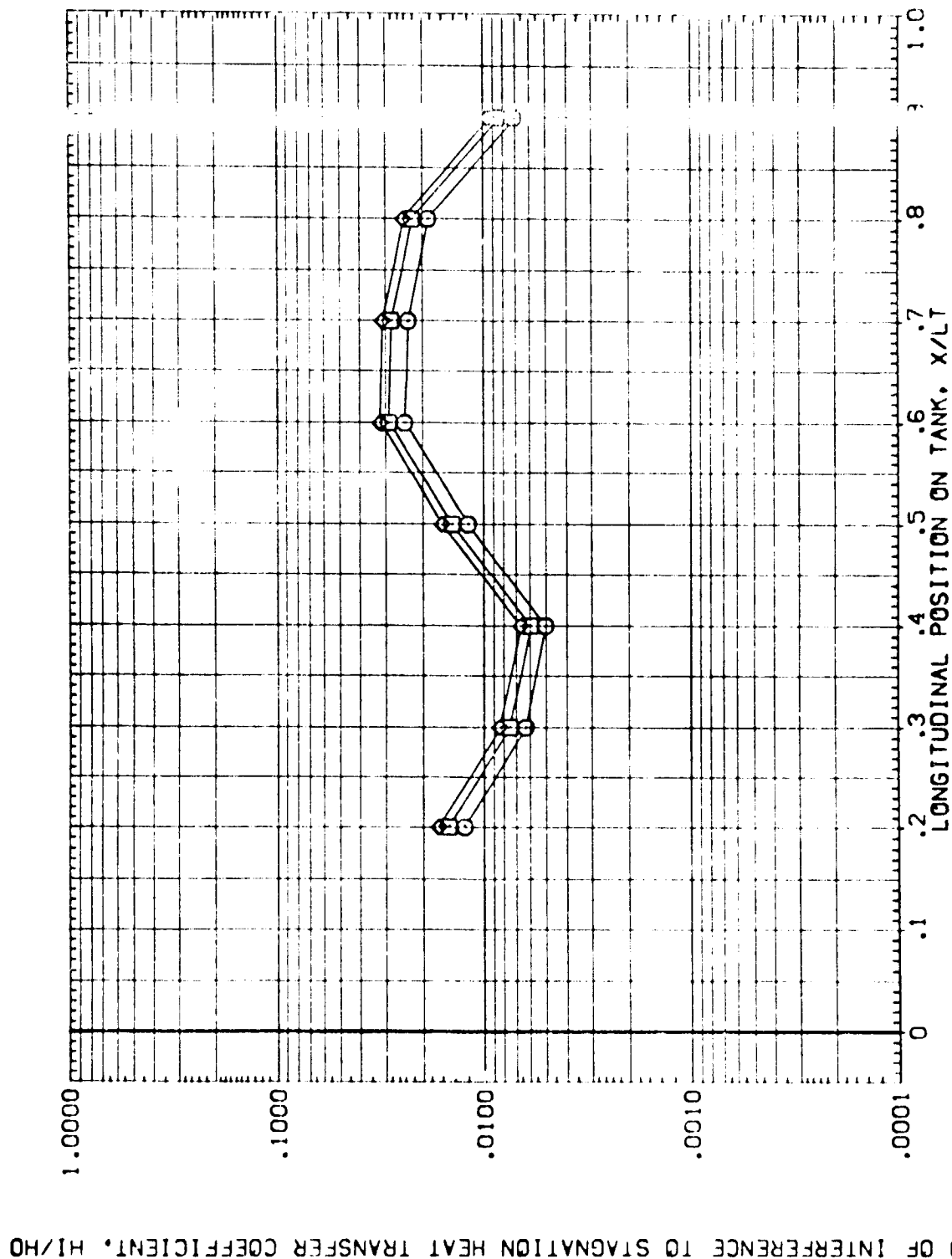


FIGURE 4 HEAT TRANSFER COEFFICIENTS ON EXTERNAL TANK.

$\alpha_{MACH} = 8.000$ $\alpha_{PHA} = .000$ $\phi_{HI} = 90.000$

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HAV/HT	RV/L	BETA	ELEVON
(RKT01)	AEDC VAS2 0418 01+110 EXTERNAL TANK	1.000	3.720	.000	.000
(A-KT01)	AEDC VAS2 0418 01+110 EXTERNAL TANK	.800	3.720	.000	.000
(B-KT01)	AEDC VAS2 0418 01+110 EXTERNAL TANK	.650	3.720	.000	.000

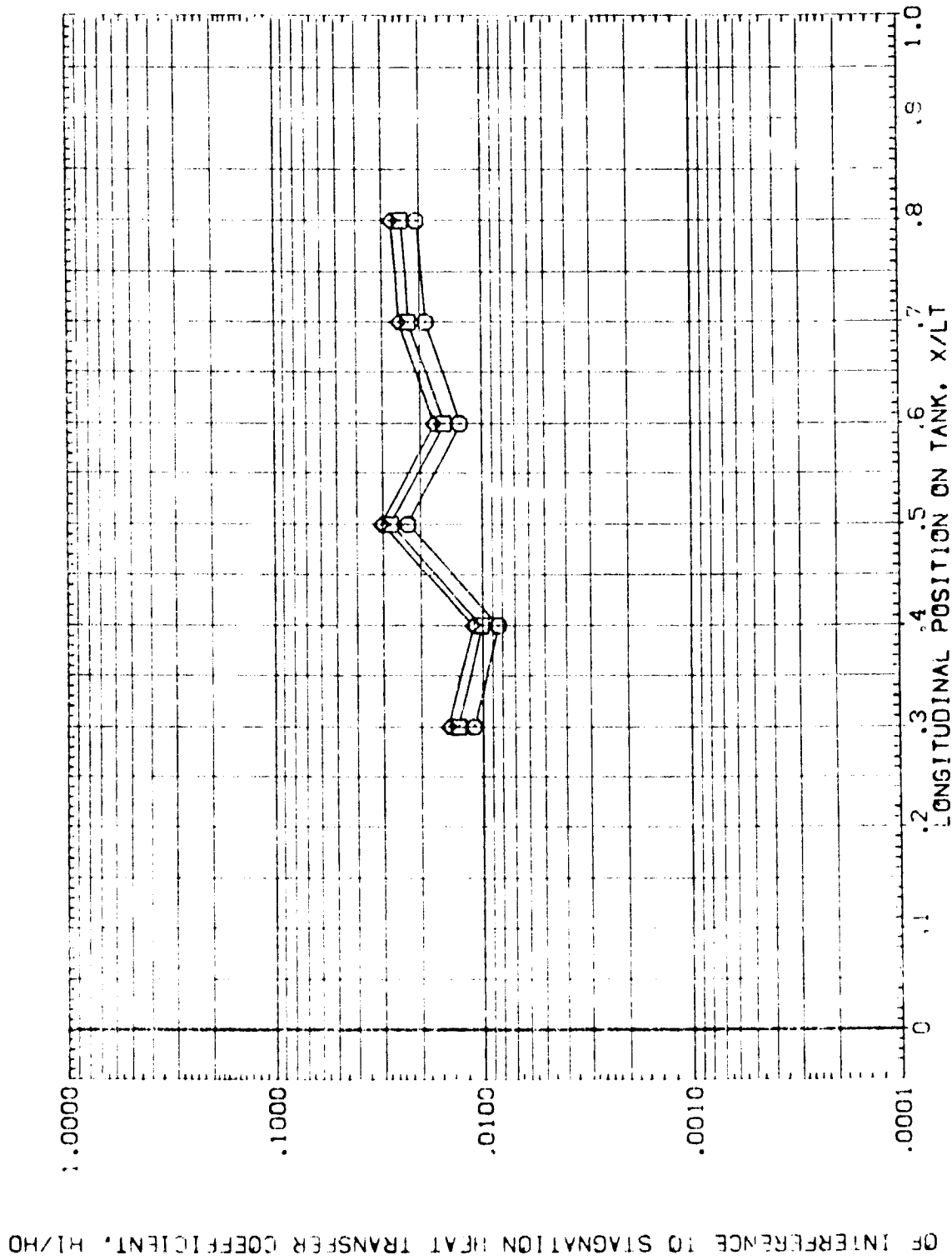


FIGURE 4 HEAT TRANSFER COEFFICIENTS ON EXTERNAL TANK.

$MACH = 8.000$ $ALPHA = .000$ $PHI = 112.500$

RATIO OF INTERFERENCE TO STAGNATION HEAT TRANSFER COEFFICIENT, h_i/h_o

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HAW/HT	RA/L	BETA	ELEVON
(RTKT01)	AEDC VA352	1.000	3.720	.000	.000
(ATKT01)	0-48 01+T10 EXTERNAL TANK	.900	3.720	.000	.000
(BTKT01)	AEDC VA352	.850	3.720	.000	.000

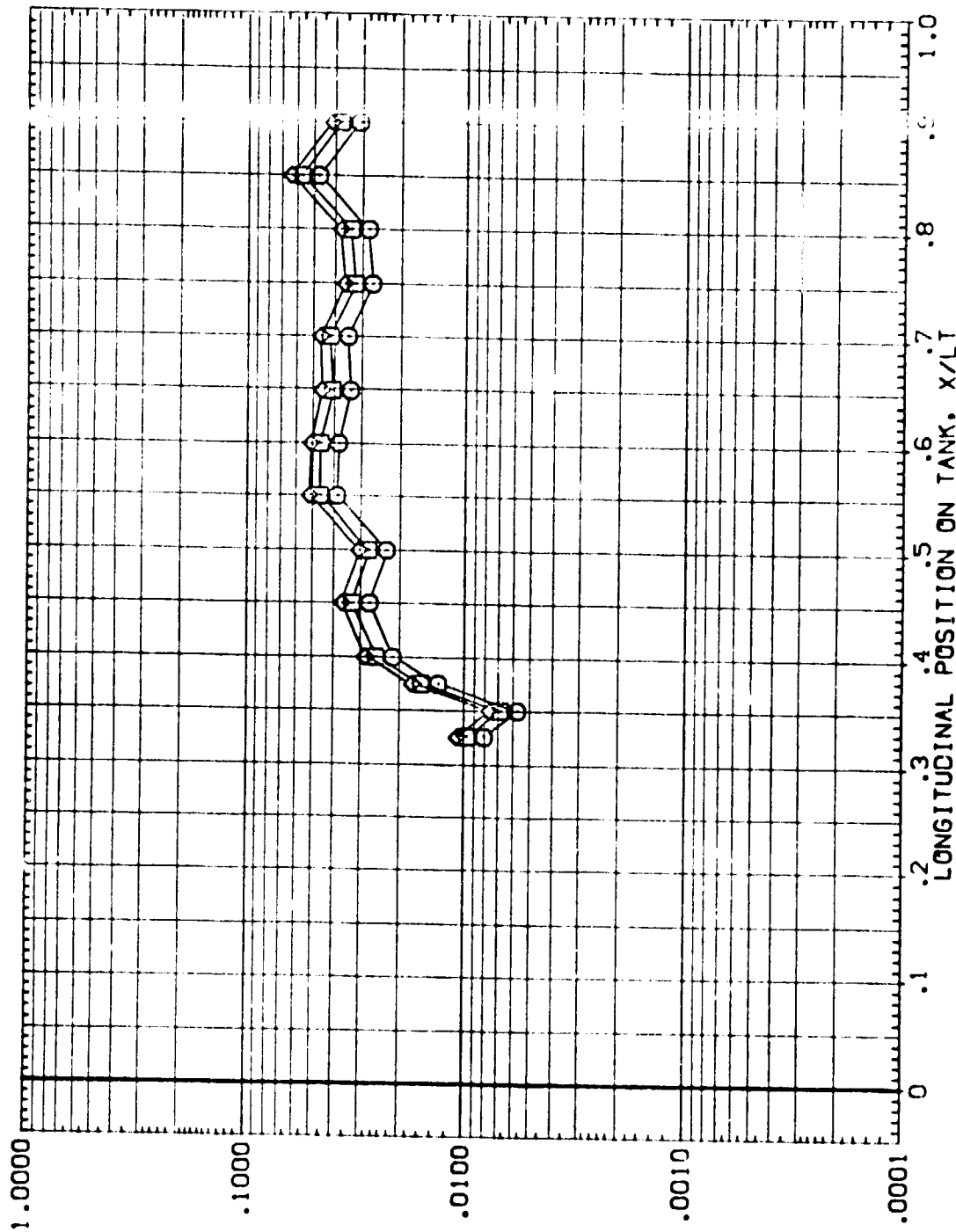


FIGURE 4 HEAT TRANSFER COEFFICIENTS ON EXTERNAL TANK.

$MACH = 8.000$ $ALPHA = .000$ $PHI = 135.000$

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HAU/HT	RNU	BETA	ELEVON
(RTKTO1)	AEDC VA352 OHB 01+T10 EXTERNAL TANK	1.000	3.720	.000	.000
(ATKTO1)	AEDC VA352 OHB 01+T10 EXTERNAL TANK	.900	3.720	.000	.000
(BTKTO1)	AEDC VA352 OHB 01+T10 EXTERNAL TANK	.850	3.720	.000	.000

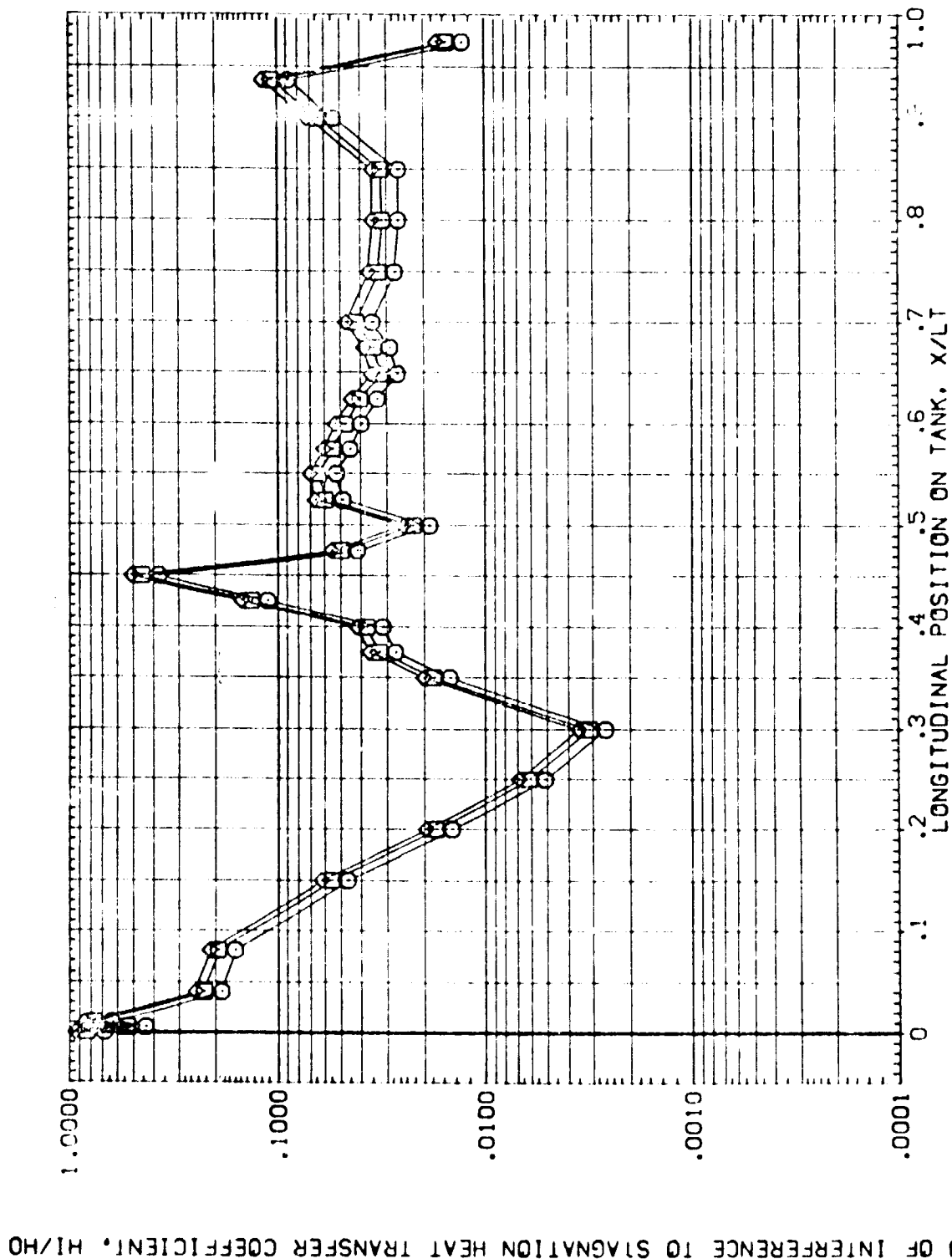


FIGURE 4 HEAT TRANSFER COEFFICIENTS ON EXTERNAL TANK.

MACH = 8.000 ALPHA = .000 P+I = 180.000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MAV/MT	RM/L	BETA	ELEVON
(RTKTOS)	AEDC VA352 D-48 T10	1.000	3.720	.000	.000
(ATKTOS)	AEDC VA352 D-48 T10	.900	3.720	.000	.000
(BTKTOS)	AEDC VA352 D-48 T10	.850	3.720	.000	.000

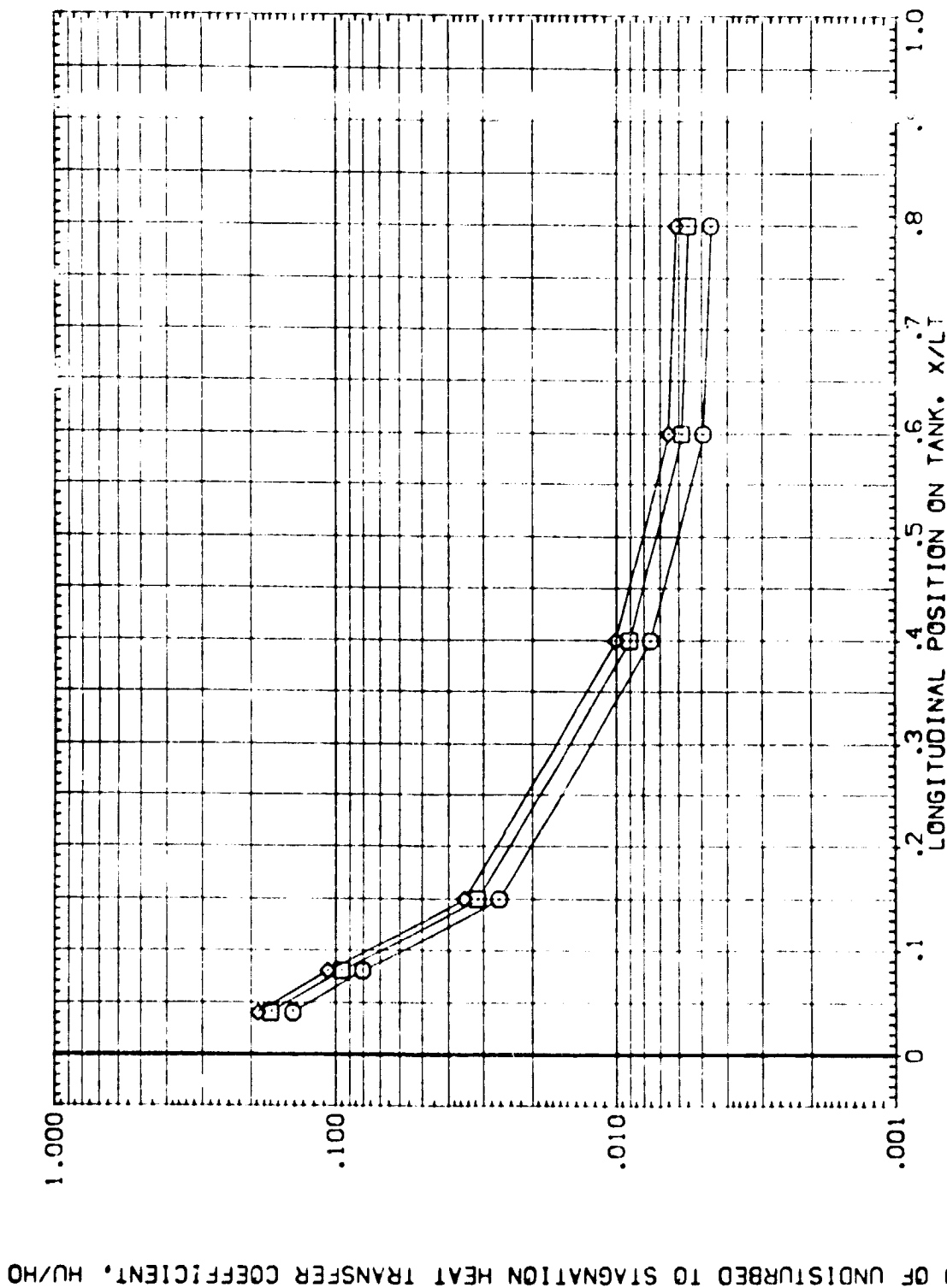


FIGURE 4 HEAT TRANSFER COEFFICIENTS ON EXTERNAL TANK.

MACH = 8.000 ALPHA = .000 PHI = .000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HA/HT	RA/L	BETA	ELEVON
(RTK06)	AEDC VA352 D-HB T10 EXTERNAL TANK	1.000	3.720	.000	.000
(ATK06)	AEDC VA352 D-HB T10 EXTERNAL TANK	.900	3.720	.000	.000
(BTK06)	AEDC VA352 D-HB T10 EXTERNAL TANK	.850	3.720	.000	.000

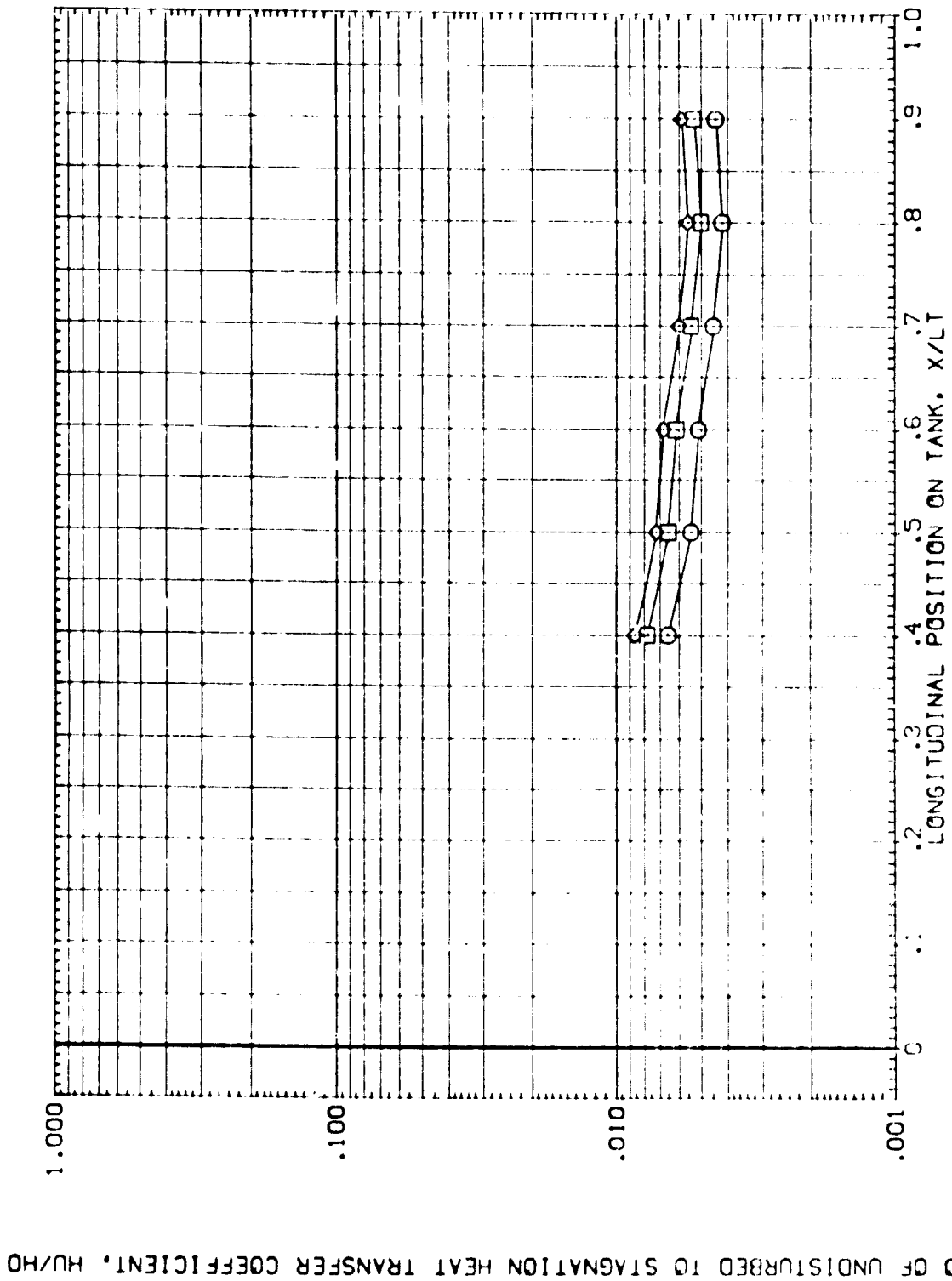


FIGURE 4 HEAT TRANSFER COEFFICIENTS ON EXTERNAL TANK.

$Re_{ACH} = 8.000$ $ALPHA = .000$ $PHI = 45.000$

DATA SET SYMBOL		CONFIGURATION DESCRIPTION		HAU/HT	FN/L	BETA	ELEVON
(RTKTS)	⊗	AEDC VA352	OH48 T10	1.000	3.720	.000	.000
(ATKTS)	⊙	AEDC VA352	EXTERNAL TANK	.900	3.720	.000	.000
(BTKTS)	⊕	AEDC VA352	EXTERNAL TANK	.850	3.720	.000	.000

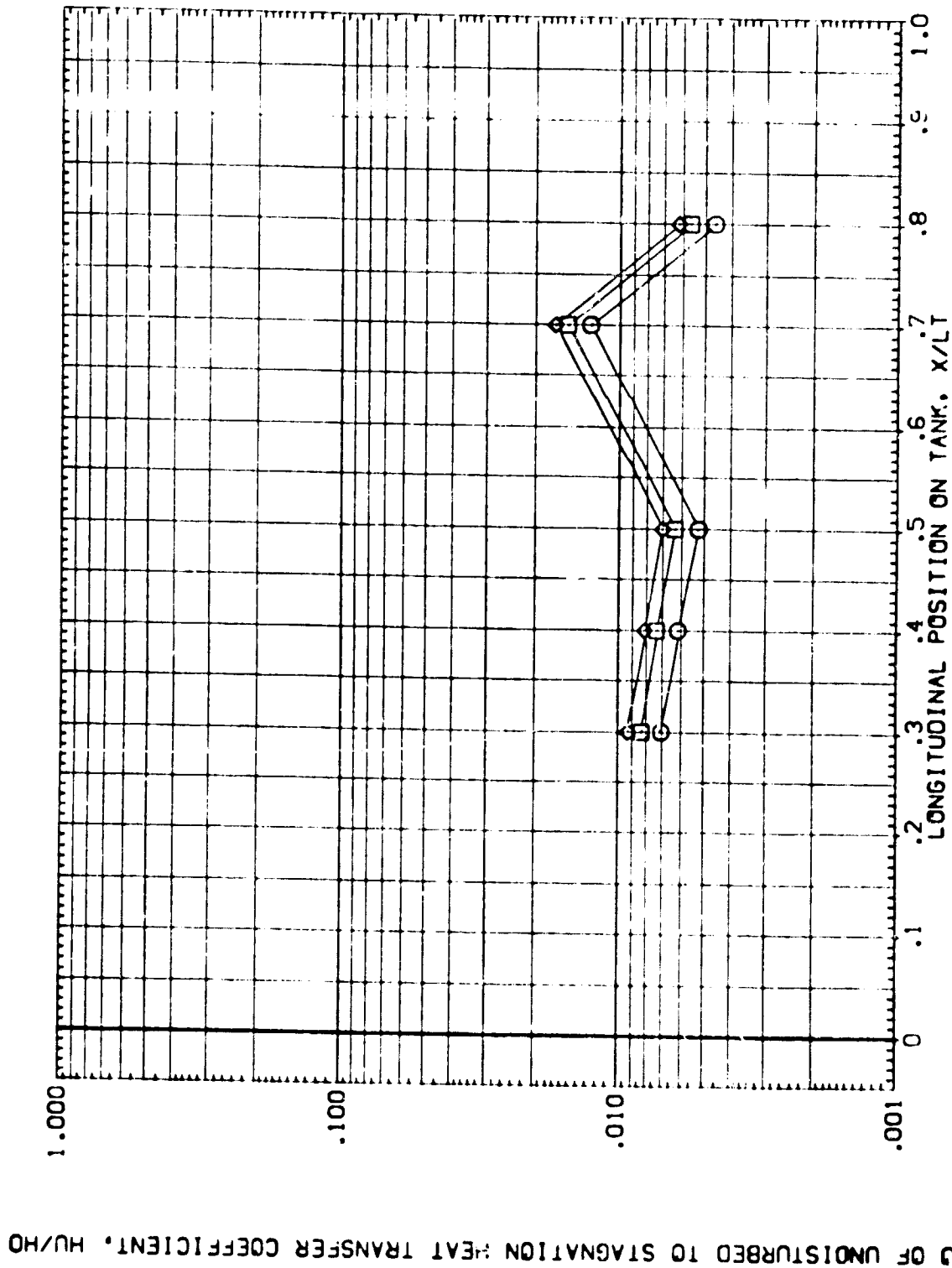


FIGURE 4 HEAT TRANSFER COEFFICIENTS ON EXTERNAL TANK.

MACH = 8.000 ALPHA = .000 PHI = 67.500

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MAV/HT	RS/L	BETA	ELEVON
(RTKTOS)	AEDC VA352 3448 T10 EXTERNAL TANK	1.000	3.720	.000	.000
(ATKTOS)	AEDC VA352 3448 T10 EXTERNAL TANK	.900	3.720	.000	.000
(BTKTOS)	AEDC VA352 3448 T10 EXTERNAL TANK	.650	3.720	.000	.000

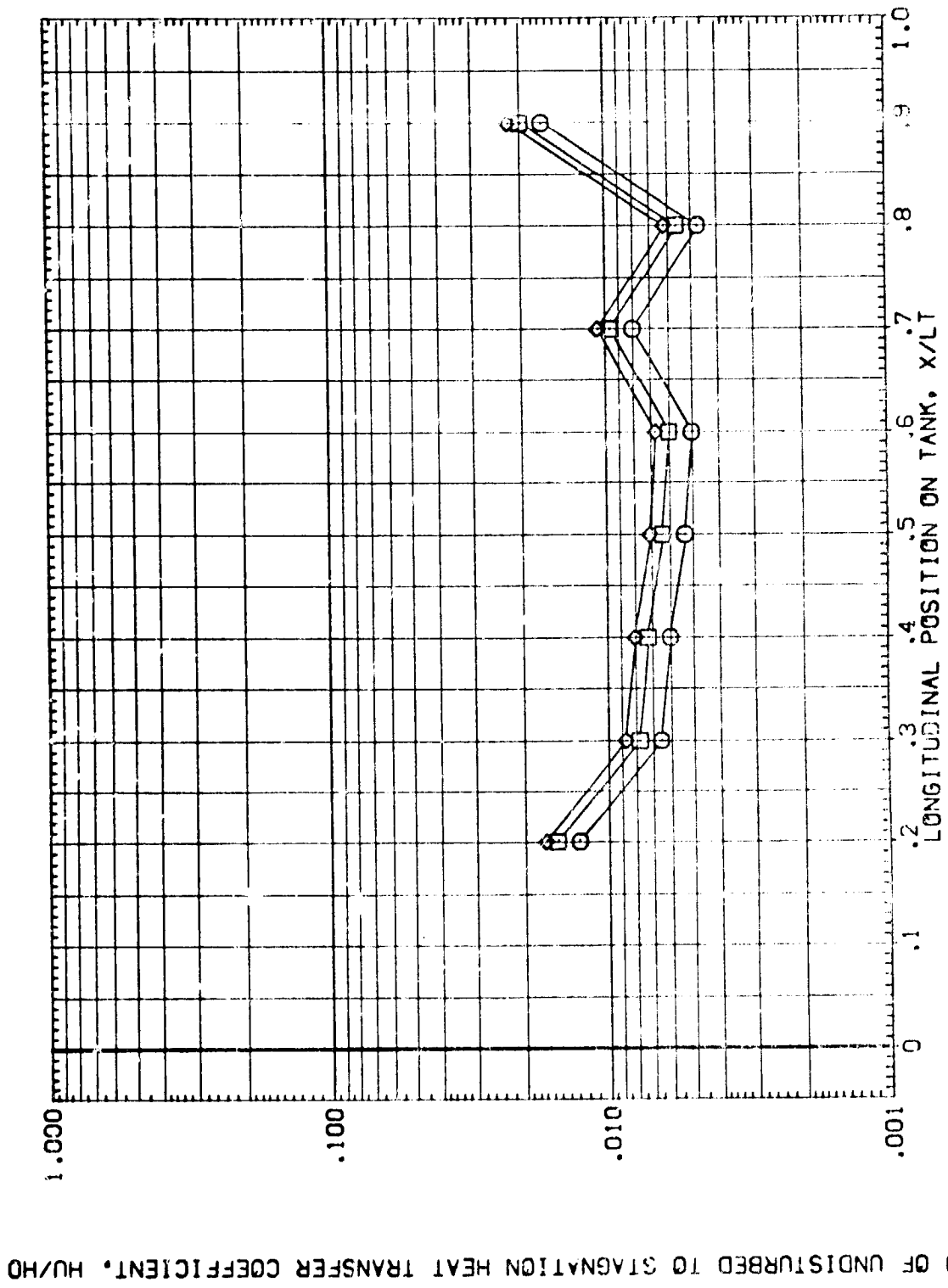


FIGURE 4 HEAT TRANSFER COEFFICIENTS ON EXTERNAL TANK.

REYNOLDS NUMBER = 8.000 ALPHA = .000 PHI = 90.000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HEIGHT	RAUL	BETA	ELEVATION
(RTT06)	AEIC VAS32 0-48 T10 EXTERNAL TANK	1.000	3.720	.000	.000
(ATT06)	AEIC VAS32 0-48 T10 EXTERNAL TANK	.500	3.720	.000	.000
(BTT06)	AEIC VAS32 0-48 T10 EXTERNAL TANK	.160	3.720	.000	.000

RATIO OF UNDISTURBED TO STAGNATION HEAT TRANSFER COEFFICIENT, HU/HO

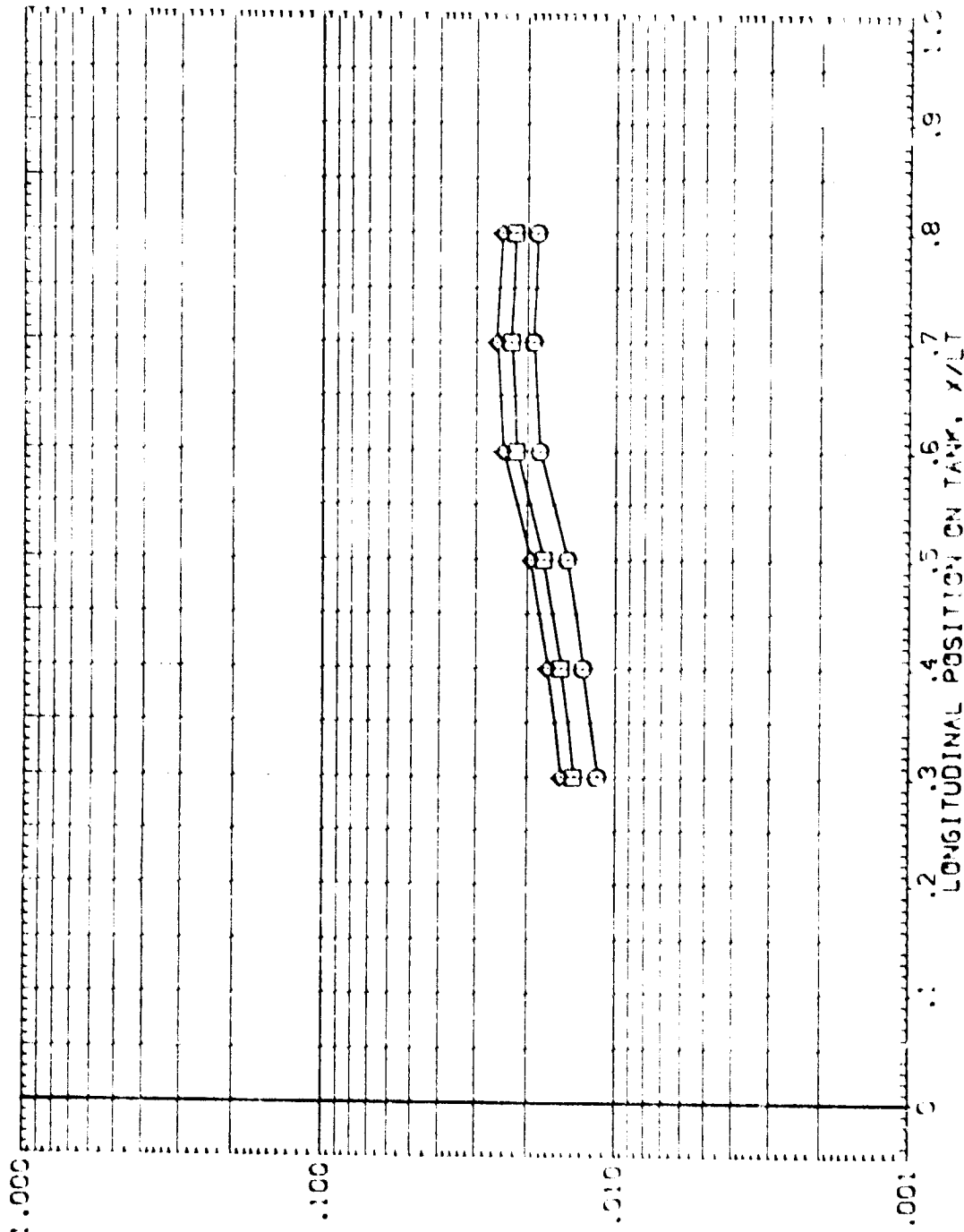


FIGURE 4 HEAT TRANSFER COEFFICIENTS ON EXTERNAL TANK.

MAC = 8.000 ALPHA = .000 PHI = 112.500

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HEIGHT	RAV	BETA	ELEVON
(RTKTS)	AEDC VAS2 0-4B T10 EXTERNAL TANK	1.000	3.720	.000	.000
(ATKTS)	AEDC VAS2 0-4B T10 EXTERNAL TANK	.900	3.720	.000	.000
(BTKTS)	AEDC VAS2 0-4B T10 EXTERNAL TANK	.850	3.720	.000	.000

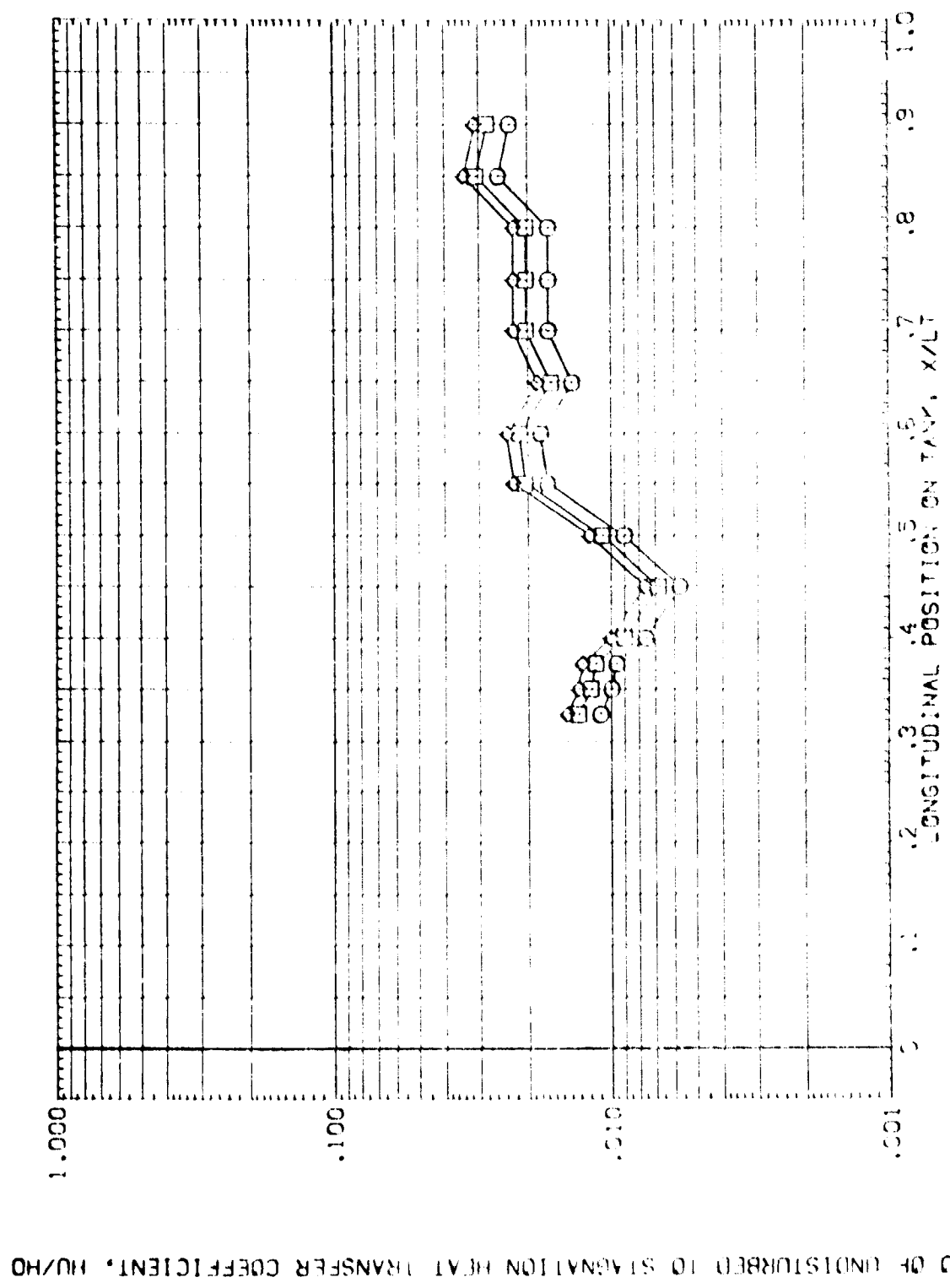


FIGURE 4 HEAT TRANSFER COEFFICIENTS ON EXTERNAL TANK.

$\text{MACH} = 8.000$ $\text{ALPHA} = .000$ $\text{PHI} = 135.000$

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HA/HT	RAVL	SET	ELEVON
(RTKT06)	AEDC VA352 D-4B T10 EXTERNAL TANK	.000	3.720	.000	.000
(ATKT06)	AEDC VA352 D-4B T10 EXTERNAL TANK	.900	3.720	.000	.000
(BTKT06)	AEDC VA352 D-4B T10 EXTERNAL TANK	.850	3.720	.000	.000

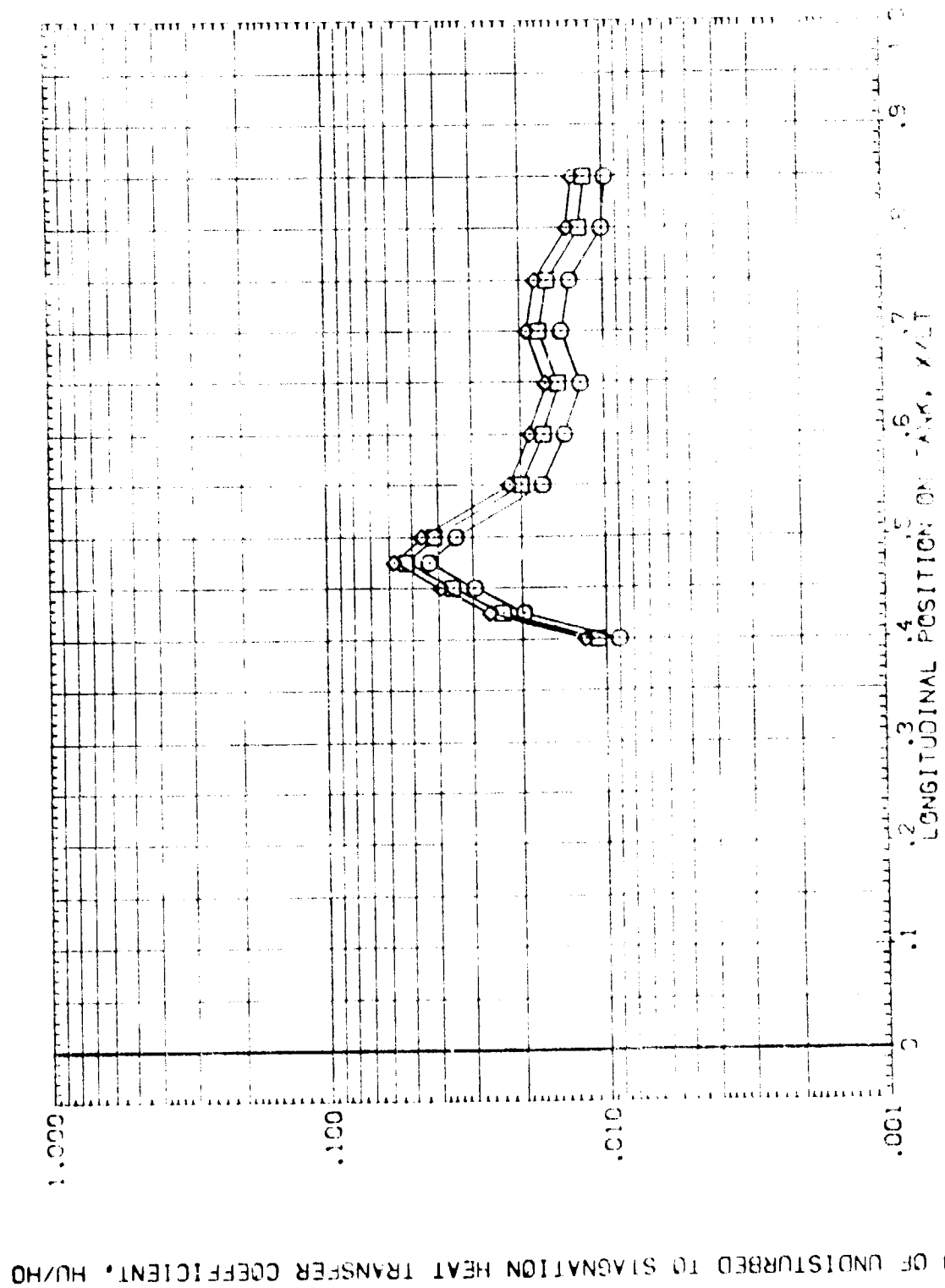


FIGURE 4 HEAT TRANSFER COEFFICIENTS ON EXTERNAL TANK,

MACH = 8.000 ALPHA = .000 PHI = 157.000



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MAV/HT	RAVL	BETA	ELEVON
(RTKT06)	AEDC VA352 D-48 T10	1.000	3.720	.000	.000
(ATKT06)	AEDC VA352 D-48 T10	.900	3.720	.000	.000
(BTKT06)	AEDC VA352 D-48 T10	.850	3.720	.000	.000

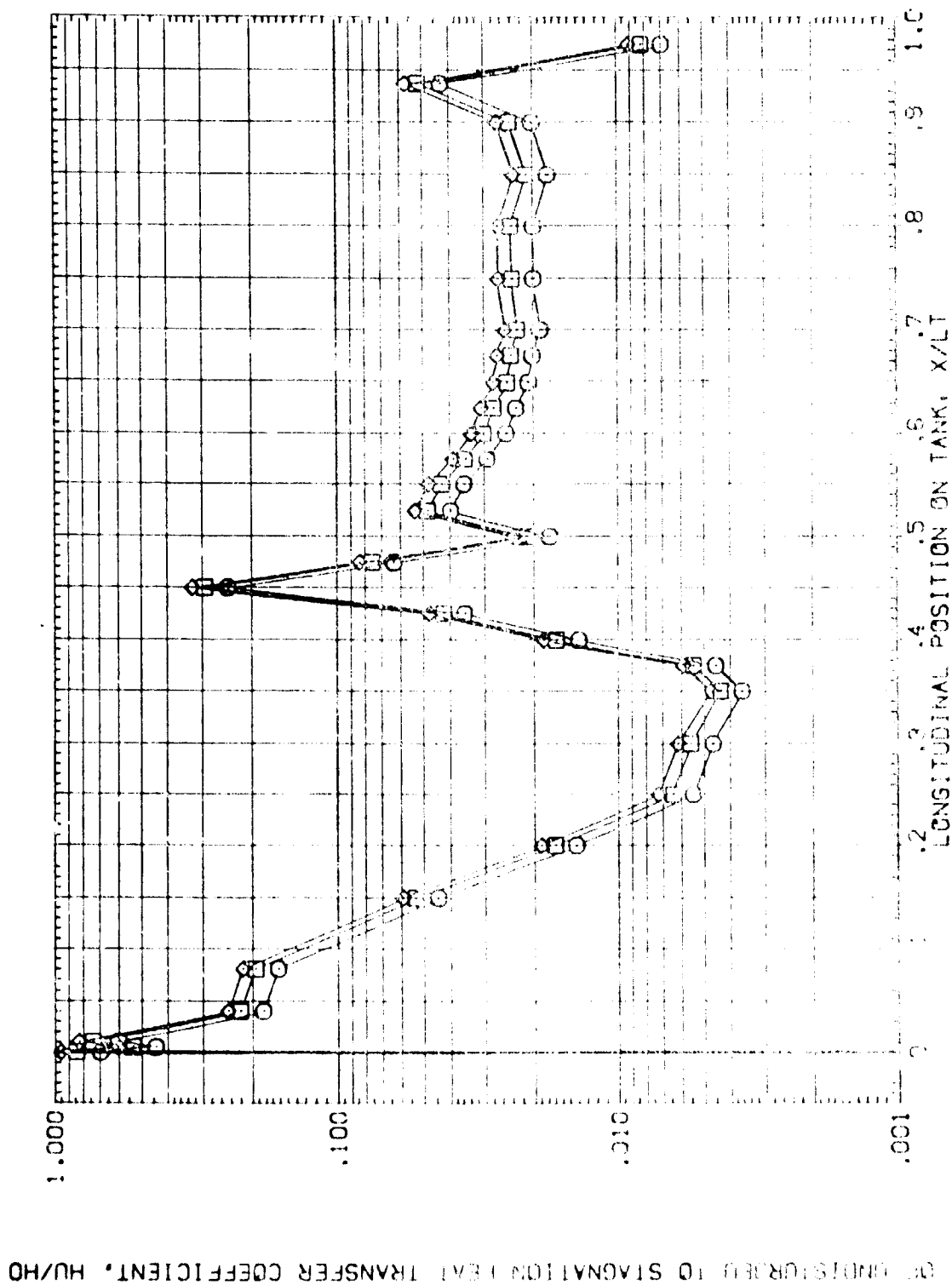


FIGURE 4 HEAT TRANSFER COEFFICIENTS ON EXTERNAL TANK.

$MACH = 8.000$ $ALPHA = .000$ $PHI = 180.000$

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NAV/HT	RVAL	BETA	ELEVON
(RTK901)	AEDC VA352 D-4B 01+T10 ORB. FUSELAGE	1.000	3.720	.000	.000
(ATK901)	AEDC VA352 D-4B 01+T10 ORB. FUSELAGE	.900	3.720	.000	.000
(8TK901)	AEDC VA352 D-4B 01+T10 ORB. FUSELAGE	.850	3.720	.000	.000

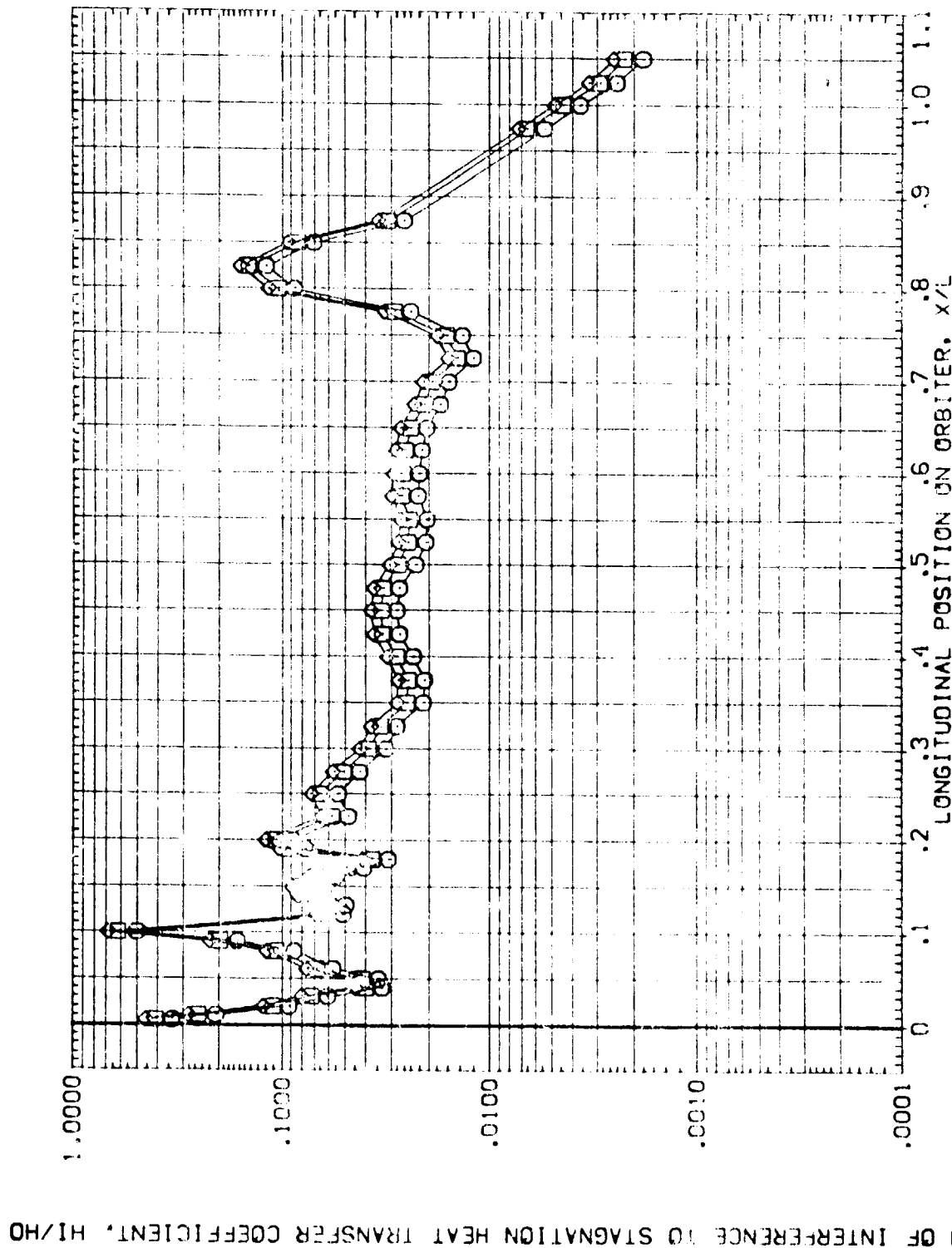


FIGURE 5 HEAT TRANSFER COEFFICIENTS ON ORBITER FUSELAGE.

MACH = 8.000 ALPHA = .000 PHI = .000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HAV/HT	RM/L	BETA	ELEVON
(PTK801)	AEDC VA352 0-48 01+1 0 C28. FUSELAGE	1.000	3.720	.000	.000
(PTK801)	AEDC VA352 0-48 01+1 0 C28. FUSELAGE	.900	3.720	.000	.000
(PTK801)	AEDC VA352 0-48 01+1 0 C28. FUSELAGE	.800	3.720	.000	.000

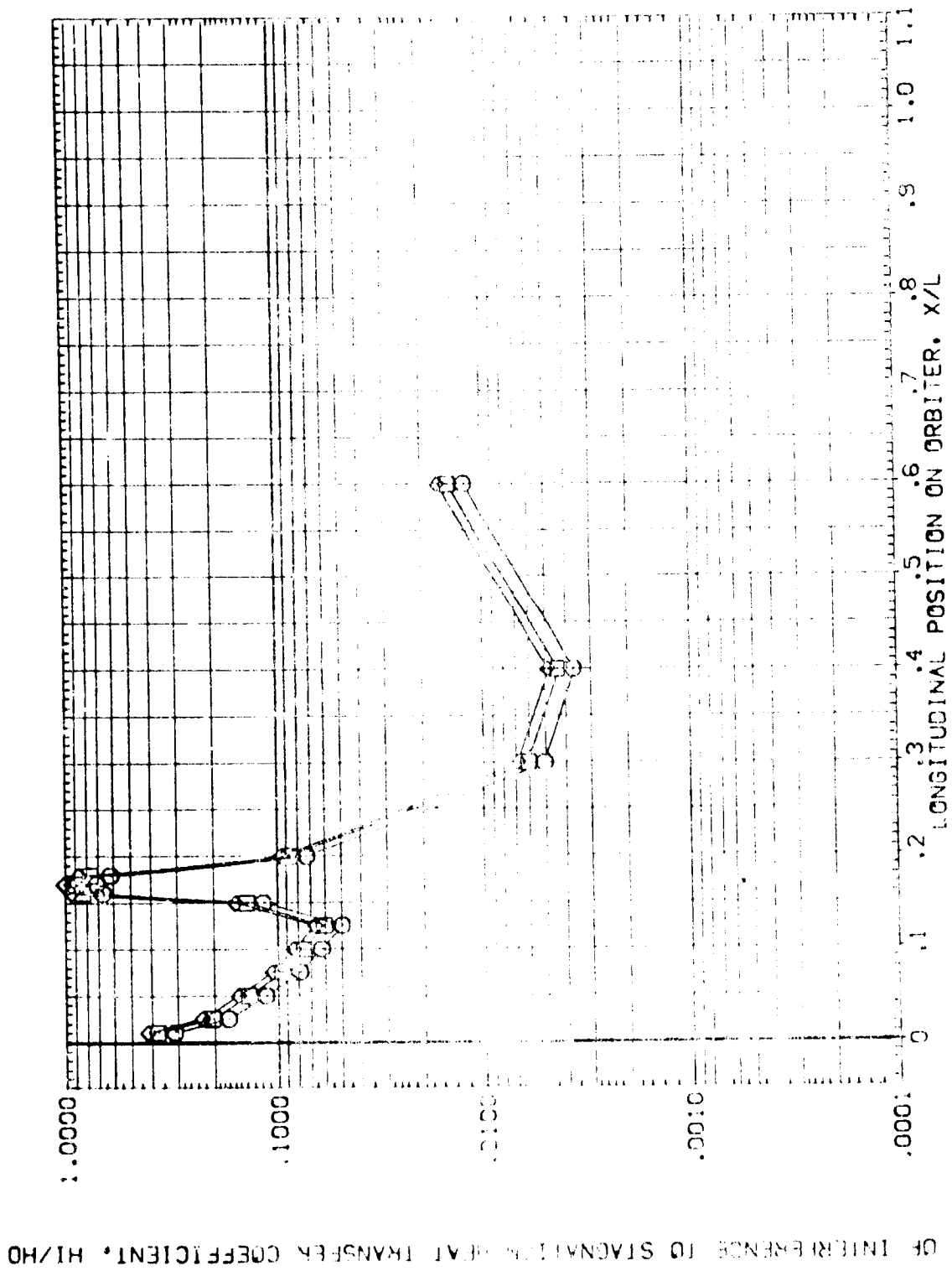


FIGURE 5 HEAT TRANSFER COEFFICIENTS ON ORBITER FUSELAGE.

$Re_{MACH} = 6.000$ $ALPHA = .000$ $PHI = 180.000$

DATA SET SYMBOL

(RTKB10)
(ATHB10)
(CTKB10)

CONFIGURATION DESCRIPTION

AEDC VA352 D448 01 ORB. FUSELAGE
AEDC VA352 D448 01 ORB. FUSELAGE
AEDC VA352 D448 01 ORB. FUSELAGE

H/W/H T R/V/L BETA ELEVON
1.000 3.720 .000 .000
.500 3.720 .000 .000
.000 3.720 .000 .000

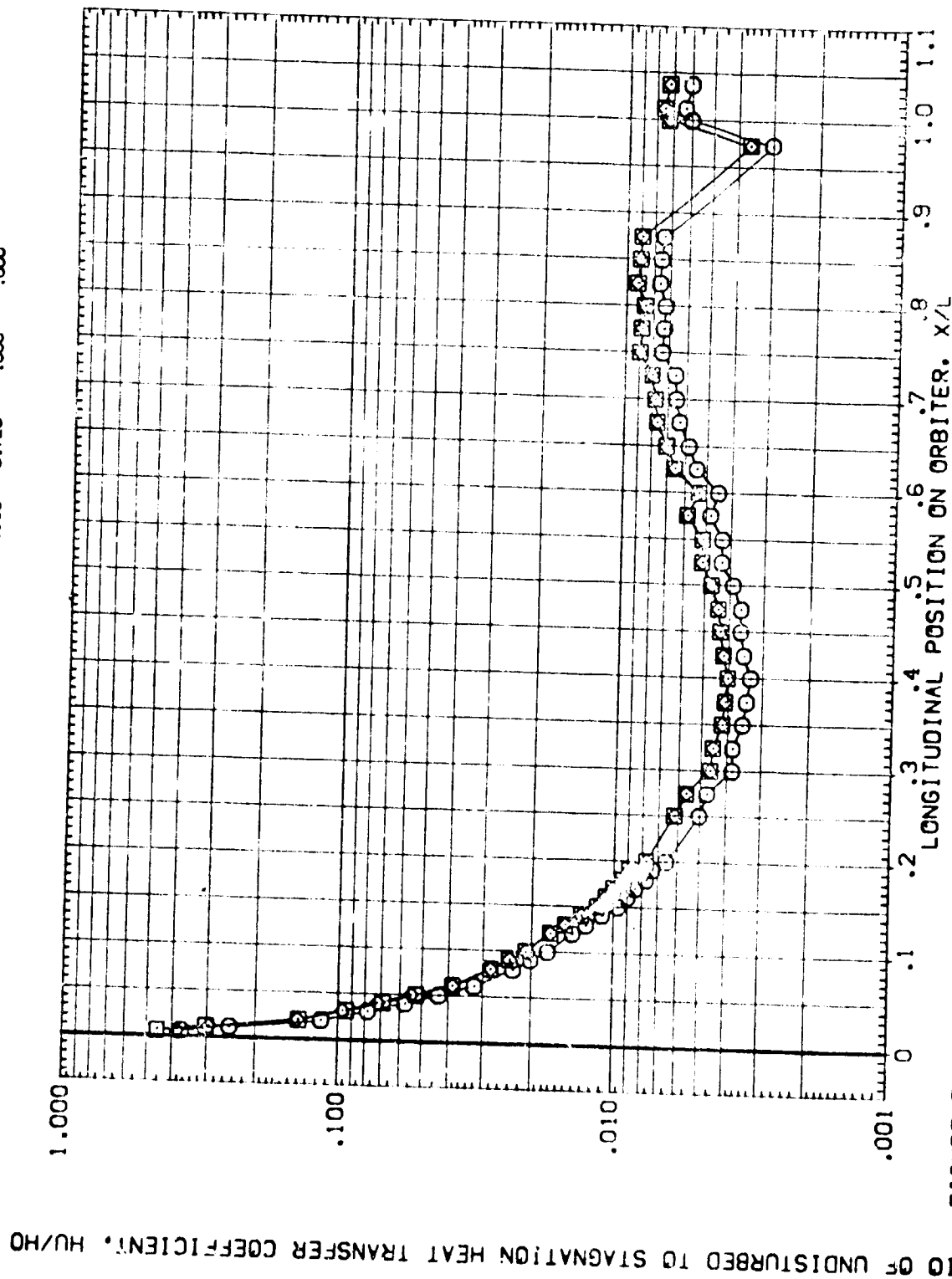


FIGURE 5 HEAT TRANSFER COEFFICIENTS ON ORBITER FUSELAGE.

$MACH = 8.000$ $ALPHA = .000$ $PHI = .000$

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HAVANT	RV/L	BETA	ELEVON
001	AEDE VA-52 0-40 01	1.000	3.720	.000	.000
002	AEDE VA-52 0-40 01	.900	3.720	.000	.000
003	AEDE VA-52 0-40 01	.000	3.720	.000	.000

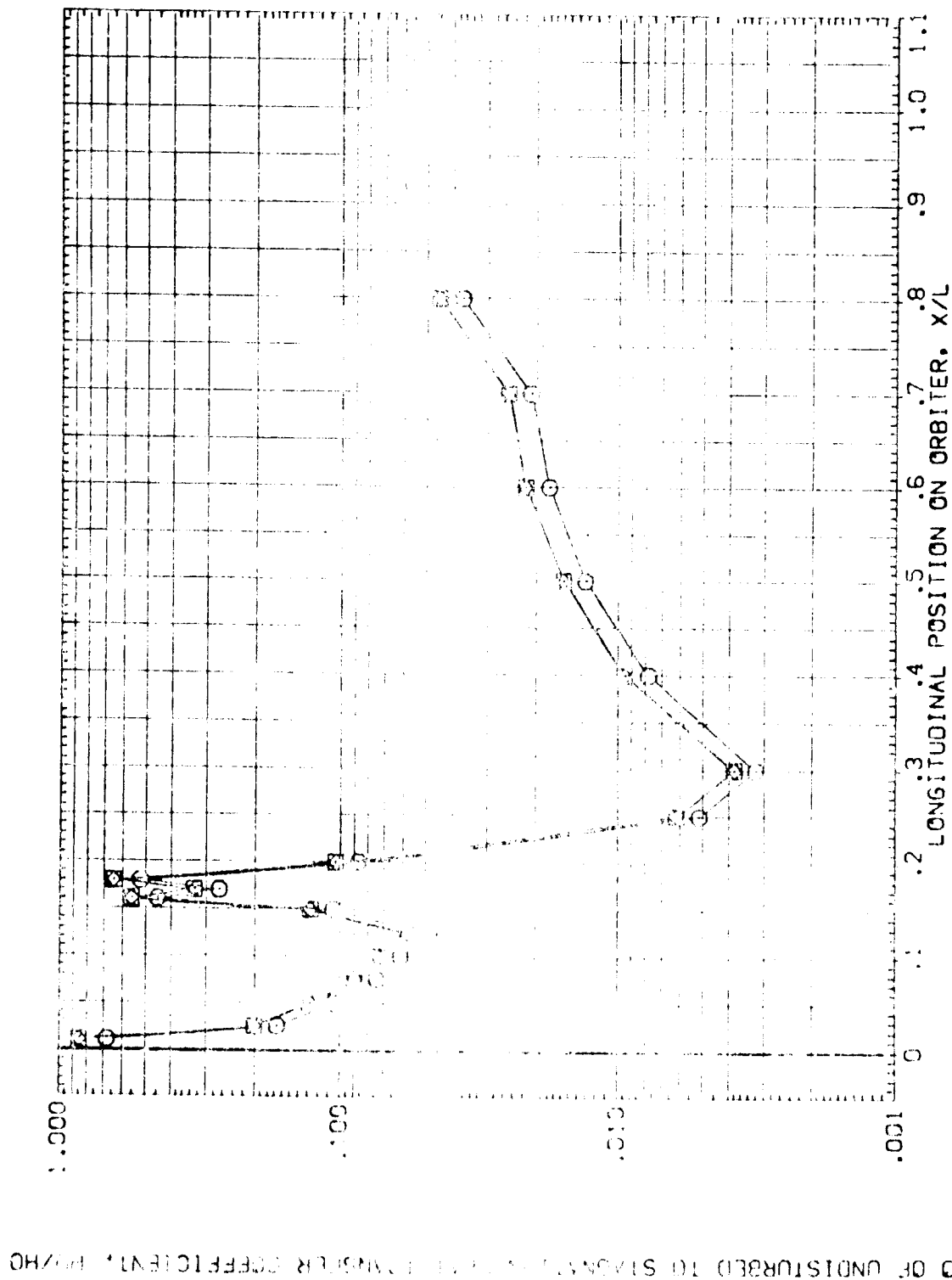


FIGURE 5 HEAT TRANSFER COEFFICIENTS ON ORBITER FUSELAGE.

WACH = 8.000 ALPHA = .000 PHI = 180.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RTMB29) AEDC VA352 0-4B 02 098. FUSELAGE
 (ATK809) AEDC VA352 0-4B 02 098. FUSELAGE
 (CTMB29) AEDC VA352 0-4B 02 098. FUSELAGE

HEIGHT FNLV BETA ELEVON
 1.000 3.720 .000 .000
 .900 3.720 .000 .000
 .000 3.720 .000 .000

Ratio of Undisturbed to Stagnation Heat Transfer Coefficient, h_u/h_0

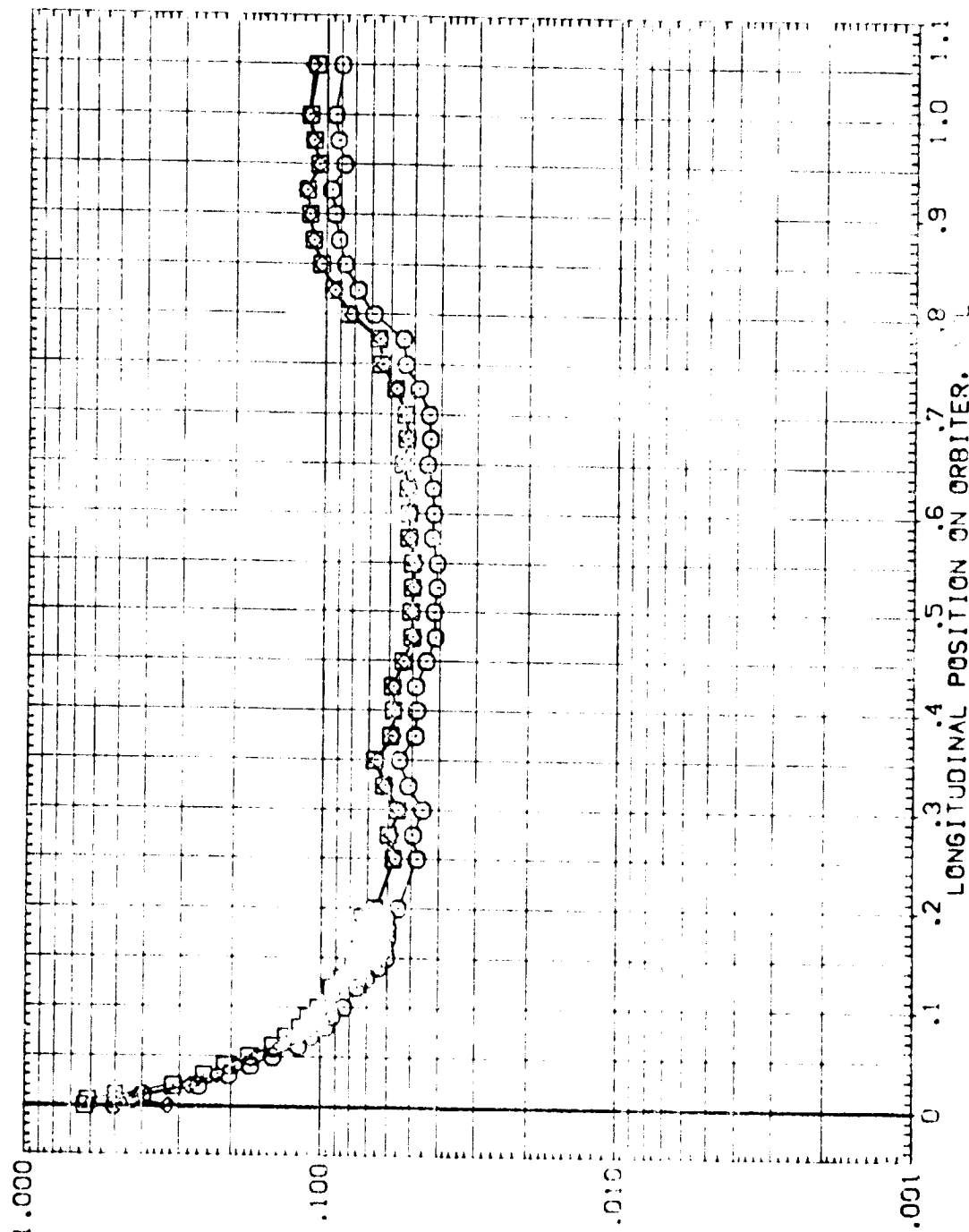


FIGURE 5 HEAT TRANSFER COEFFICIENTS ON ORBITER FUSELAGE.

$M_{\text{MACH}} = 8.000$ $\alpha = 25.000$ $\phi = .000$

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MAV/MT	RM/L	BETA	ELEVON
(RTLO1)	AEDE VAS2 048 01+110 058.	1.000	3.720	.000	.000
(ATKLO1)	AEDE VAS2 048 01+110 058.	.900	3.720	.000	.000
(BTKLO1)	AEDE VAS2 048 01+110 058.	.850	3.720	.000	.000

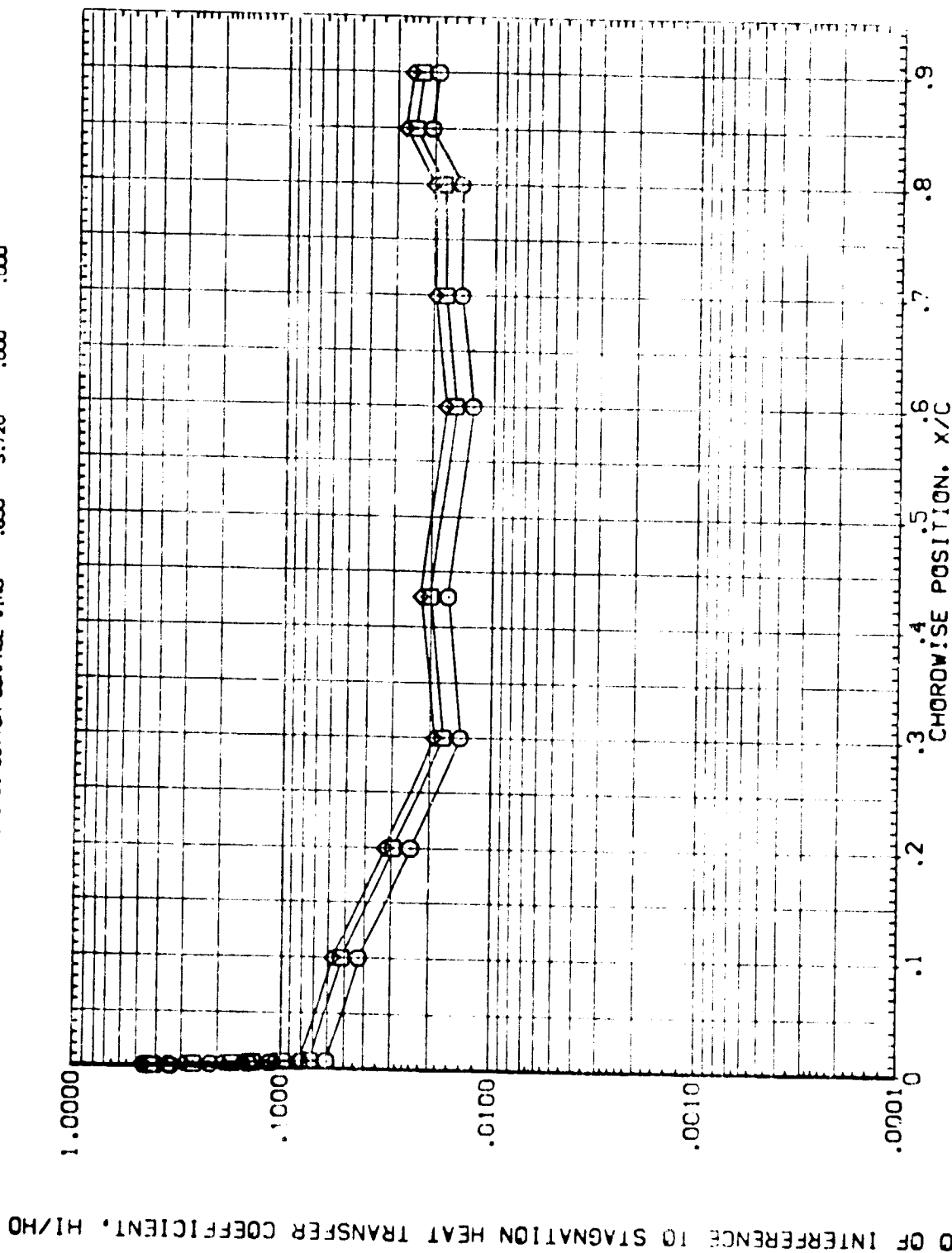


FIGURE 6 HEAT TRANSFER COEFFICIENTS ON LOWER WING SURFACE OF ORBITER.

$M_{\text{MACH}} = 8.000$ $\alpha = 0.000$ $2Y/B = 0.600$

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	WING/HT	FWL	BETA	ELEVON
(BTOL01)	0-10 3-10 3-10 3-10	1.000	3.720	.000	.000
(BTOL02)	0-10 3-10 3-10 3-10	.900	3.720	.000	.000
(BTOL03)	0-10 3-10 3-10 3-10	.850	3.720	.000	.000

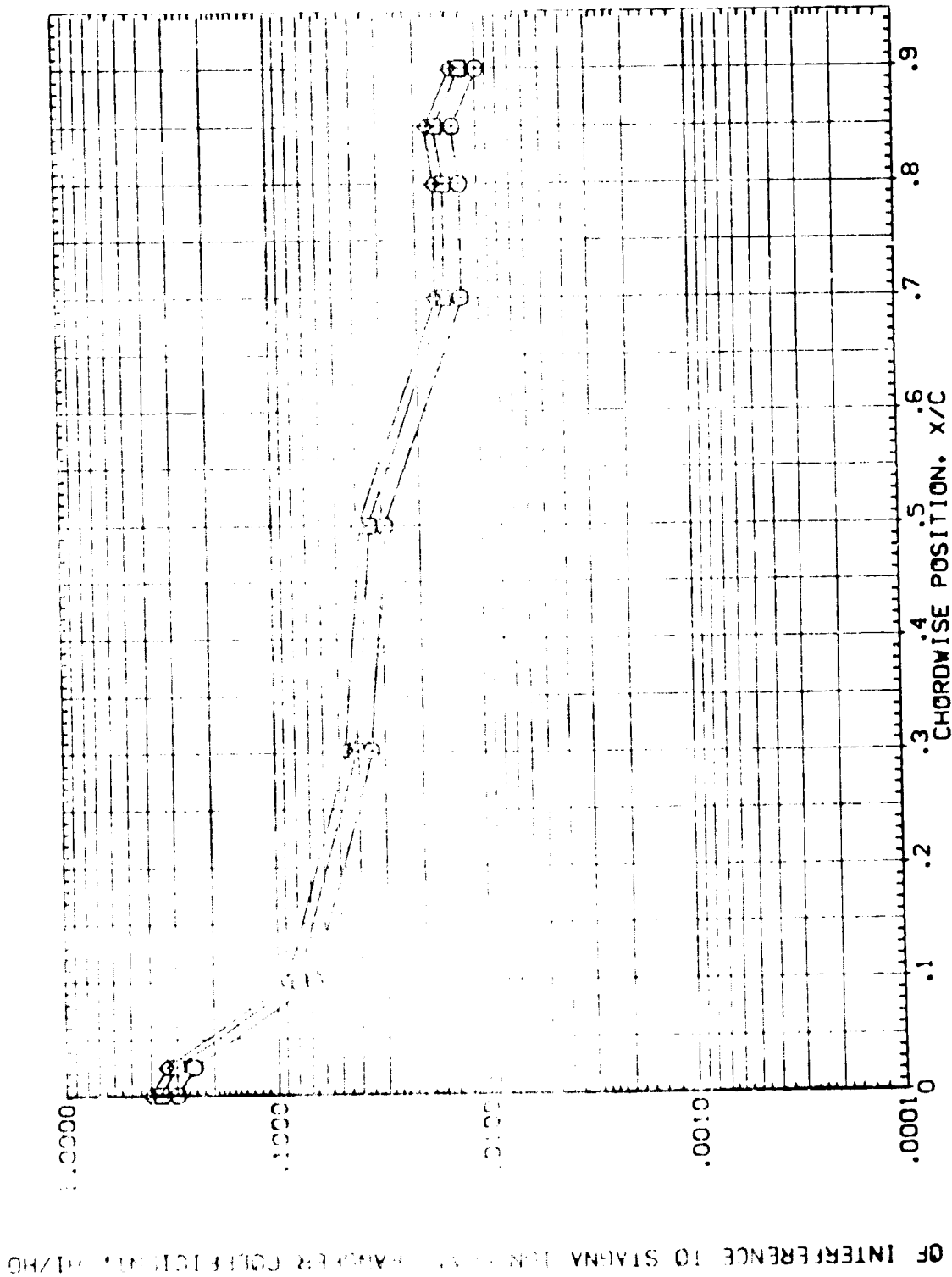


FIGURE 6 HEAT TRANSFER COEFFICIENTS ON LOWER WING SURFACE OF ORBITER.

$MACH = 8.000$ $ALPHA = .000$ $2Y/B = .750$

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HEIGHT	SWL	BETA	ELEVON
(RTKL10)	AEDC VA352 0-4B 01	1.000	3.720	.000	.000
(ATKL10)	AEDC VA352 0-4B 01	.900	3.720	.000	.000
(CTKL10)	AEDC VA352 0-4B 01	.800	3.720	.000	.000

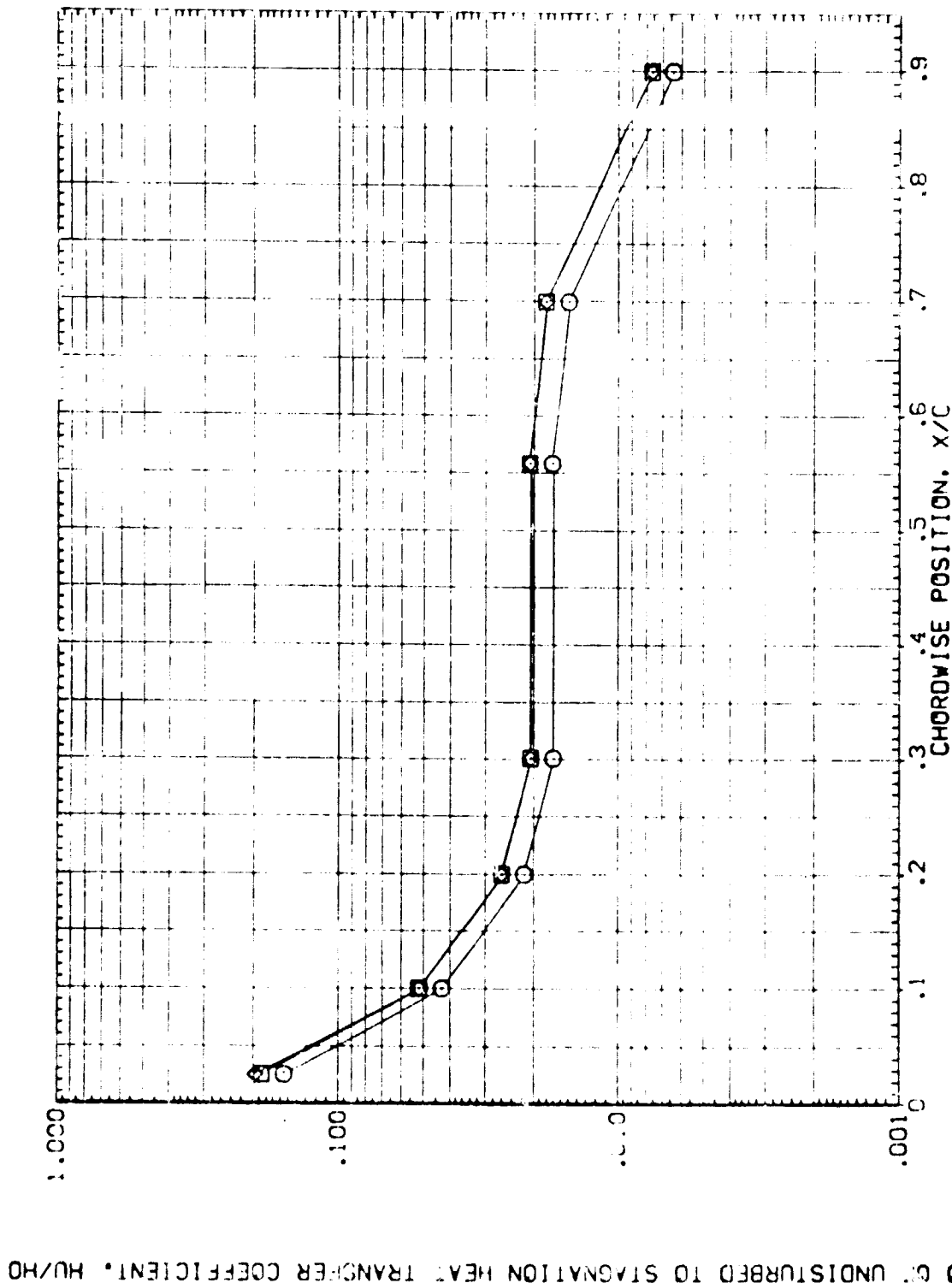
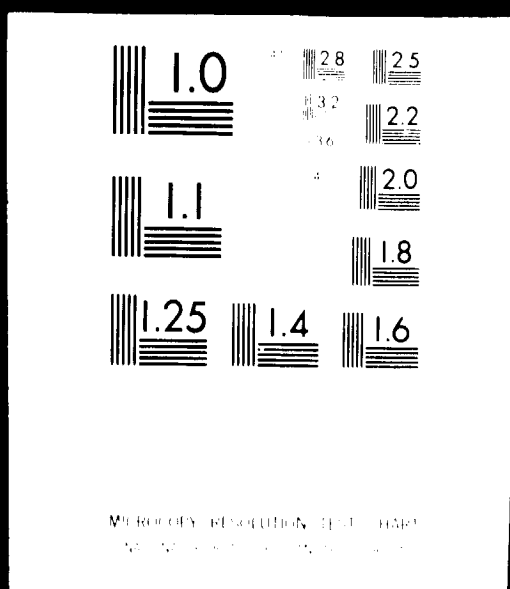


FIGURE 6 HEAT TRANSFER COEFFICIENTS ON LOWER WING SURFACE OF ORBITER.

MACH = 8.000 ALPHA = .000 2Y/B = .400

2 of 7

175 18290 UNCLAS



DATA SET SYMBOL: (RTKL10) (LTKL10) (CTKL10) AEDC VA352 AEDC VA352 AEDC VA352
 CONFIGURATION DESCRIPTION: ORB. SURFACE WING ORB. SURFACE WING ORB. SURFACE WING
 HAW/HT: 1.000 1.000 1.000
 RM/L: 3.720 3.720 3.720
 BETA: .000 .000 .000
 ELEVATION: .000 .000 .000

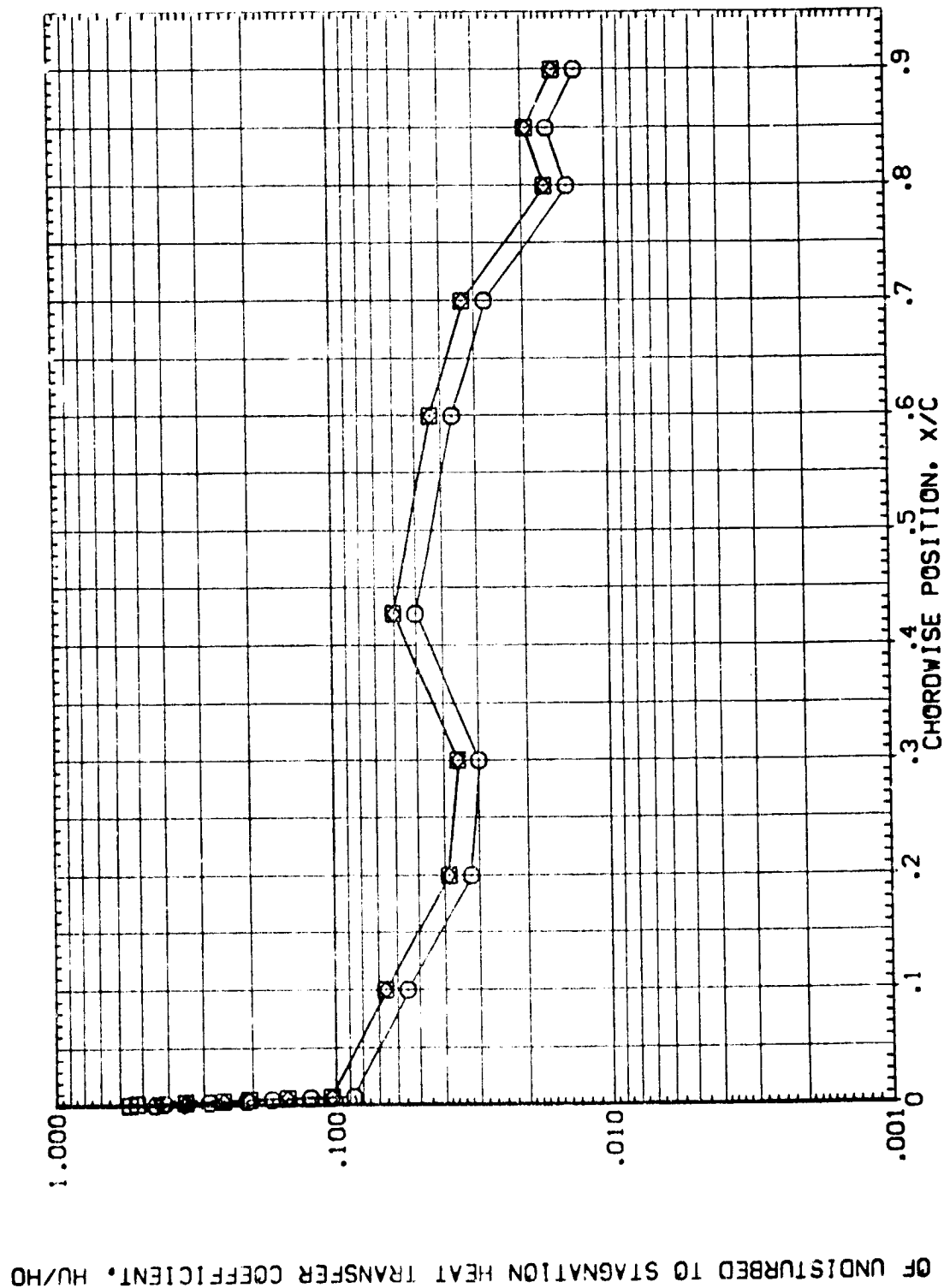


FIGURE 6 HEAT TRANSFER COEFFICIENTS ON LOWER WING SURFACE OF ORBITER.

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HAW/HT	RAUL	BETA	ELEVON
(RTKL10)	AEDC VA352 OH4B 01	1.000	3.720	.000	.000
(ATKL10)	AEDC VA352 OH4B 01	.800	3.720	.000	.000
(CTKL10)	AEDC VA352 OH4B 01	.000	3.720	.000	.000

Ratio of Undisturbed to Stagnation Heat Transfer Coefficient, h_u/h_o

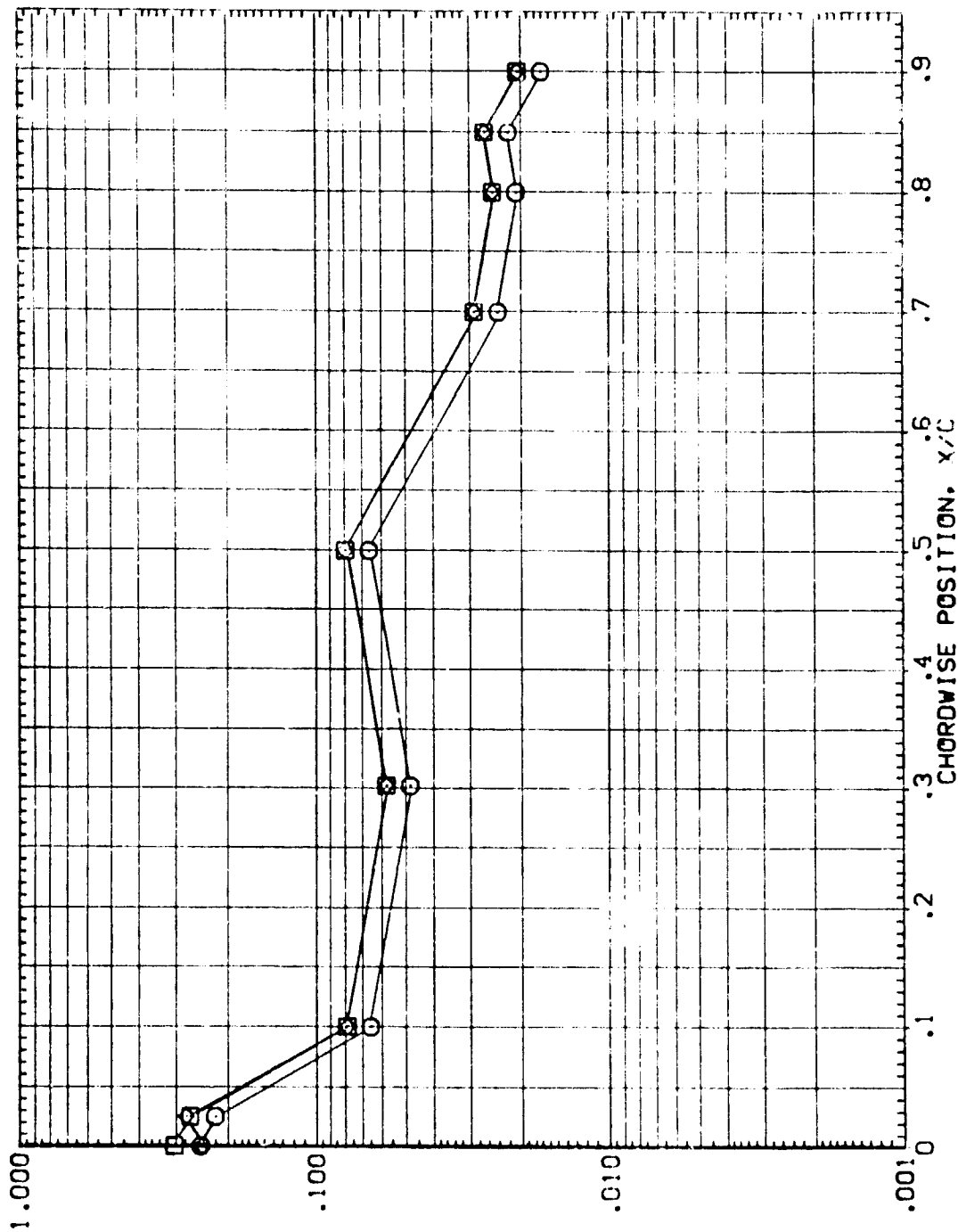


FIGURE 6 HEAT TRANSFER COEFFICIENTS ON LOWER WING SURFACE OF ORBITER

$MACH = 8.000$ $ALPHA = .000$ $2Y/B = .750$

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MA/WT	RN/L	BETA	ELEVON
(RTRL 42)	AEDC VAS2 0-4B 02	1.000	3.720	.000	.000
(ATKL 42)	088: BOTTOM SURFACE WING	.500	3.720	.000	.000
(CTKL 42)	088: BOTTOM SURFACE WING	.000	3.720	.000	.000

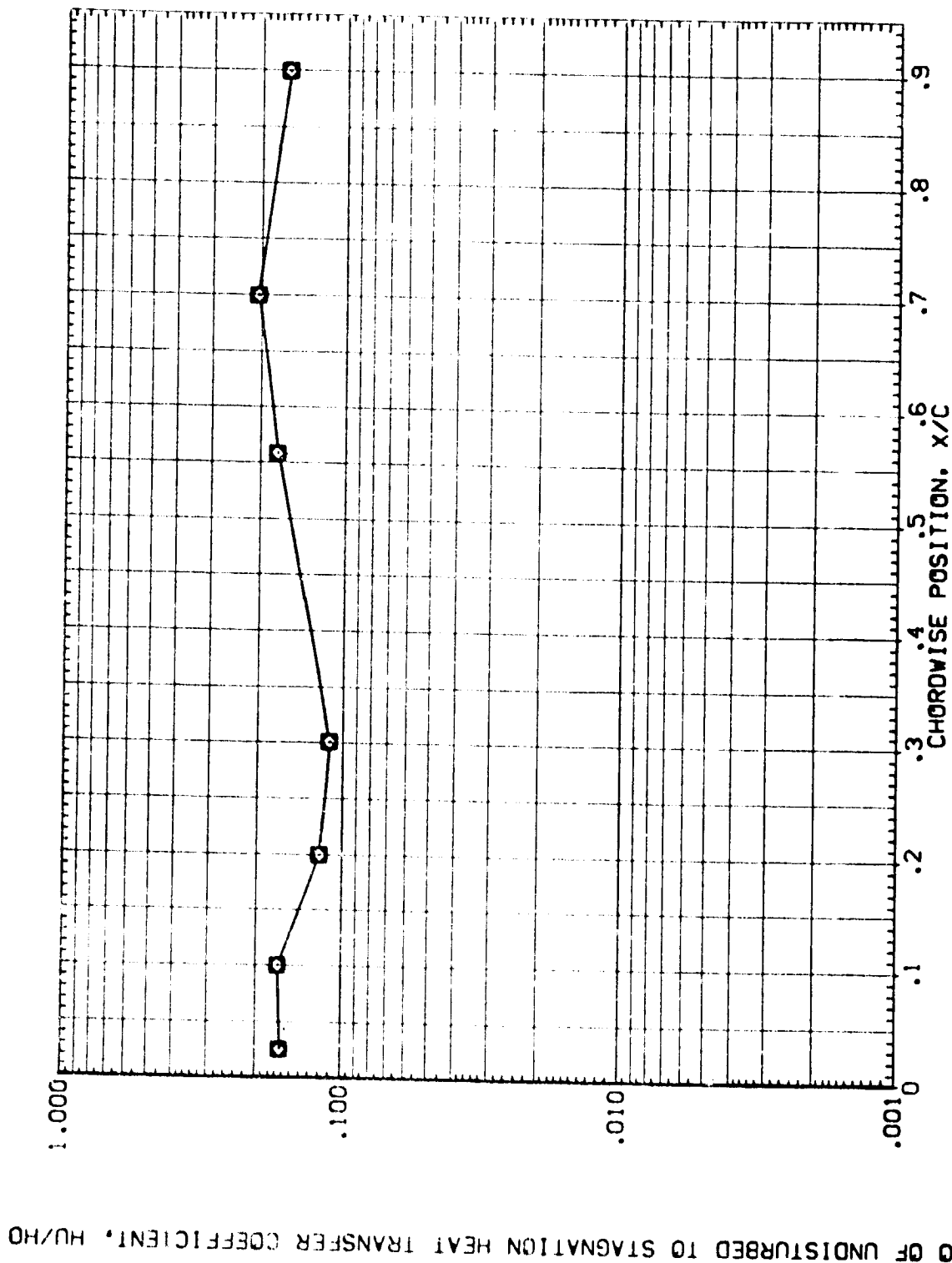


FIGURE 6 HEAT TRANSFER COEFFICIENTS ON LOWER WING SURFACE OF ORBITER.

MA/WT = 8.000 ALPHA = 30.000 2Y/B = .400

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HAWAHT	RV/L	BETA	ELEVON
(RTRL42)	AEDC VA352 0448 02	1.000	3.720	.000	.000
(LTKL42)	AEDC VA352 0448 02	.900	3.720	.000	.000
(CTRL42)	AEDC VA352 0448 02	.000	3.720	.000	.000

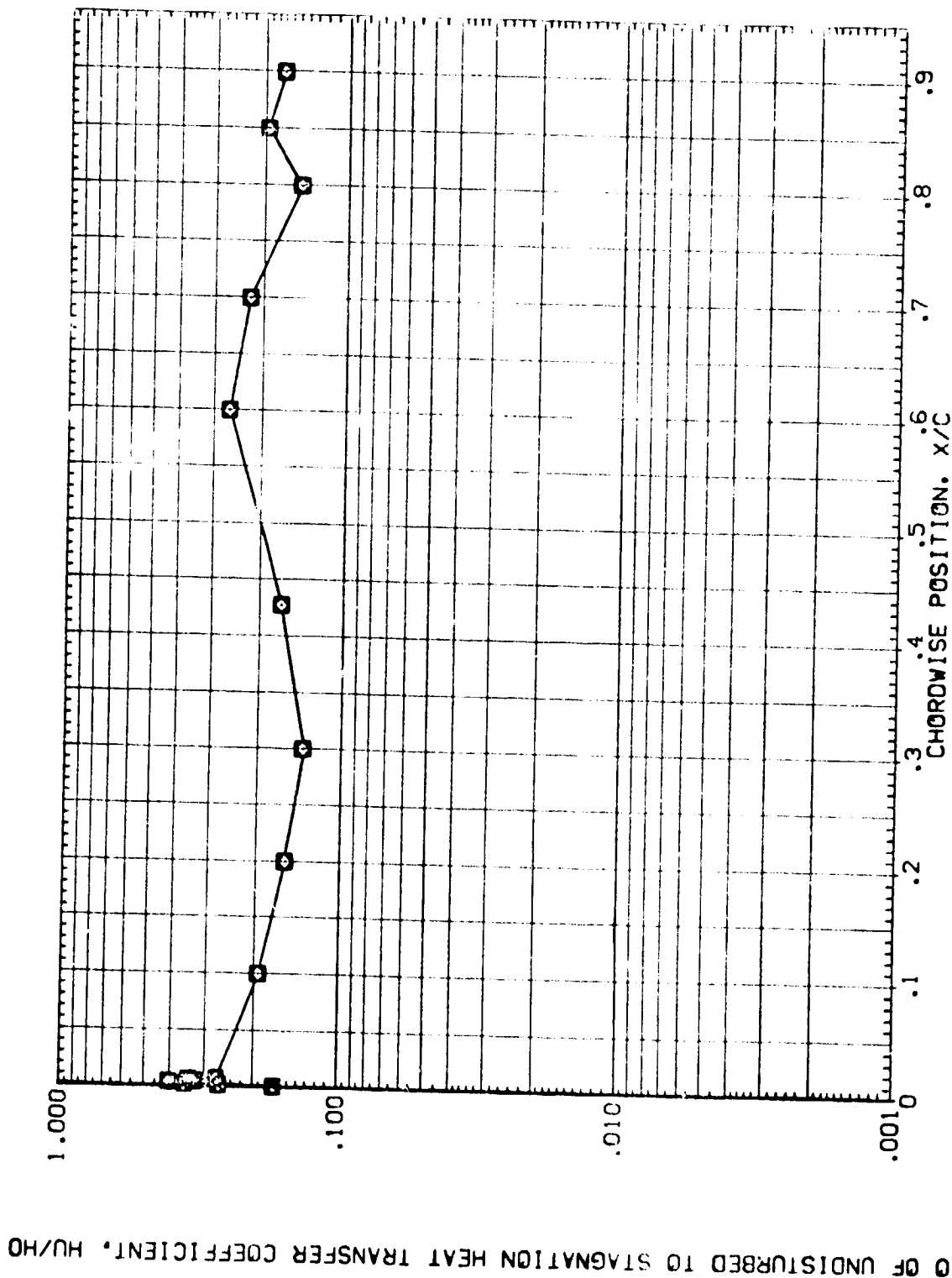


FIGURE 6 HEAT TRANSFER COEFFICIENTS ON LOWER WING SURFACE OF ORBITER.

MACH = 8.000 ALPHA = 30.000 2Y/B = .600

DATA SET SYMBOL: (RTR-42)
 CONFIGURATION DESCRIPTION:
 AEDC V-1022 C-449 02 028
 AEDC V-1022 C-449 02 029
 AEDC V-1022 C-449 02 030
 AEDC V-1022 C-449 02 031

BOOTH SURFACE WING
 30-ON SURFACE WING
 30-ON SURFACE WING
 30-ON SURFACE WING

MAVHIT 1.000
 1.900
 1.000

RAVL 3.720
 3.720
 3.720

BETA .000
 .000
 .000

ELEVON .000
 .000
 .000

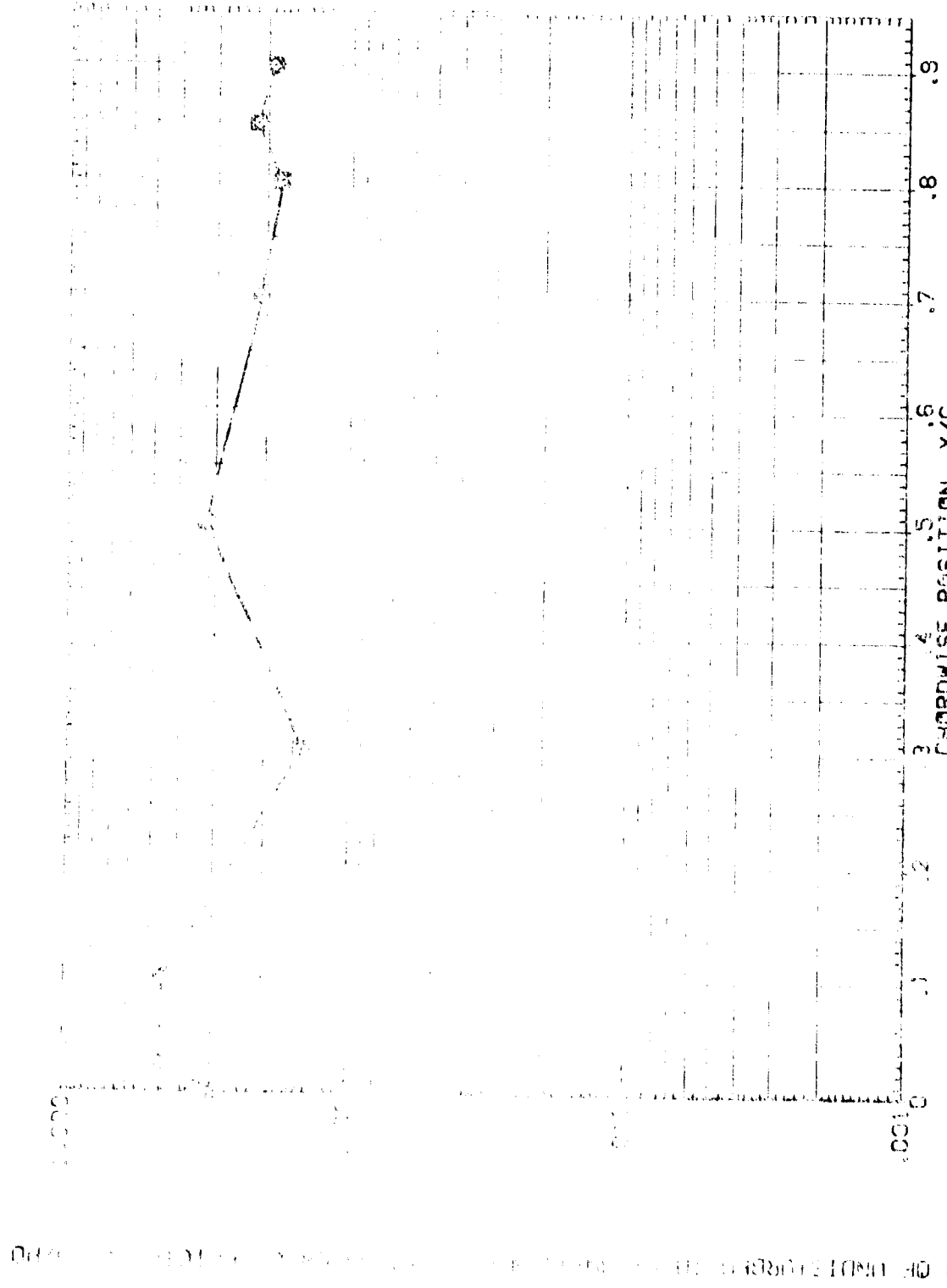


FIGURE 6 HEAT TRANSFER COEFFICIENTS ON LOWER WING SURFACE OF ORBITER.

$\alpha_{MACH} = 8.000$ $\alpha_{PHA} = 30.000$ $2Y/B = .750$

Ratio of Interference to Stagnation Heat Transfer Coefficient, h_i/h_o

DATA SET SYMBOL CONFIGURATION DESCRIPTION UPPER SURFACE VING HAW/HT RN/L BETA ELEVON

(RTM-01) AEDC VA352 0-44B 01+110 098. 1.000 3.720 .000 .000

(ATC-01) AEDC VA352 0-44B 01+110 098. .900 3.720 .000 .000

(BT-001) AEDC VA352 0-44B 01+110 098. .850 3.720 .000 .000

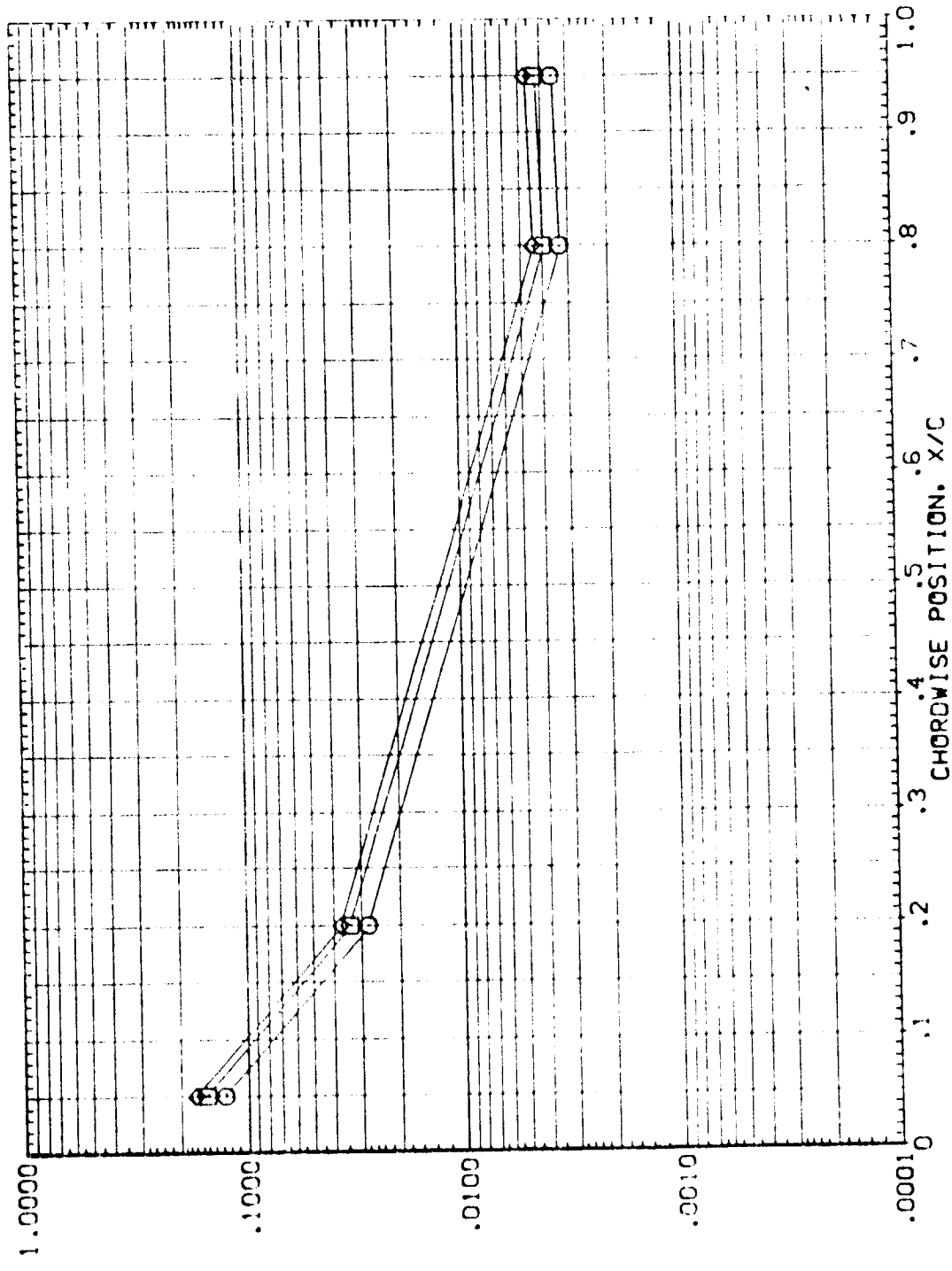


FIGURE 7 HEAT TRANSFER COEFFICIENTS ON UPPER WING SURFACE OF ORBITER.

MACH = 8.000 ALPHA = .000 2Y/B = .600 PAGE 30



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HAV/HT	RAVL	BETA	ELEVON
(ATK)10)	AEDC VAS22 0-13 0	1.000	3.720	.000	.000
(ATK)10)	AEDC VAS22 0-13 0	.900	3.720	.000	.000
(ATK)10)	AEDC VAS22 0-13 0	.000	3.720	.000	.000

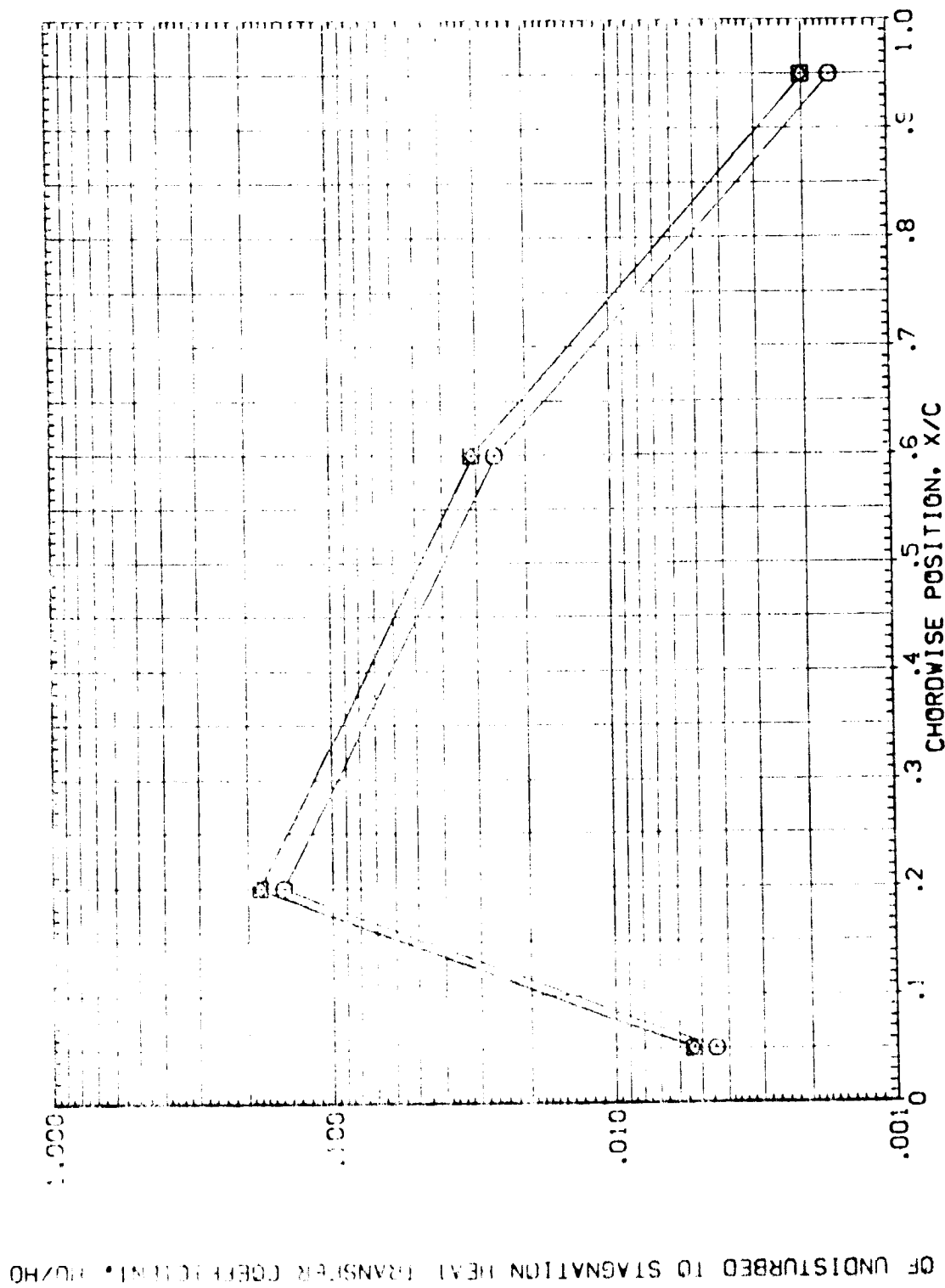


FIGURE 7 HEAT TRANSFER COEFFICIENTS ON UPPER WING SURFACE OF ORBITER.

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HAU/NT	RN/L	BETA	ELEVON
(RTUJ10)	AEDC VA352 D44B 01	1.000	3.720	.000	.000
(ATUJ10)	AEDC VA352 D44B 01	.900	3.720	.000	.000
(CTUJ10)	AEDC VA352 D44B 01	.000	3.720	.000	.000

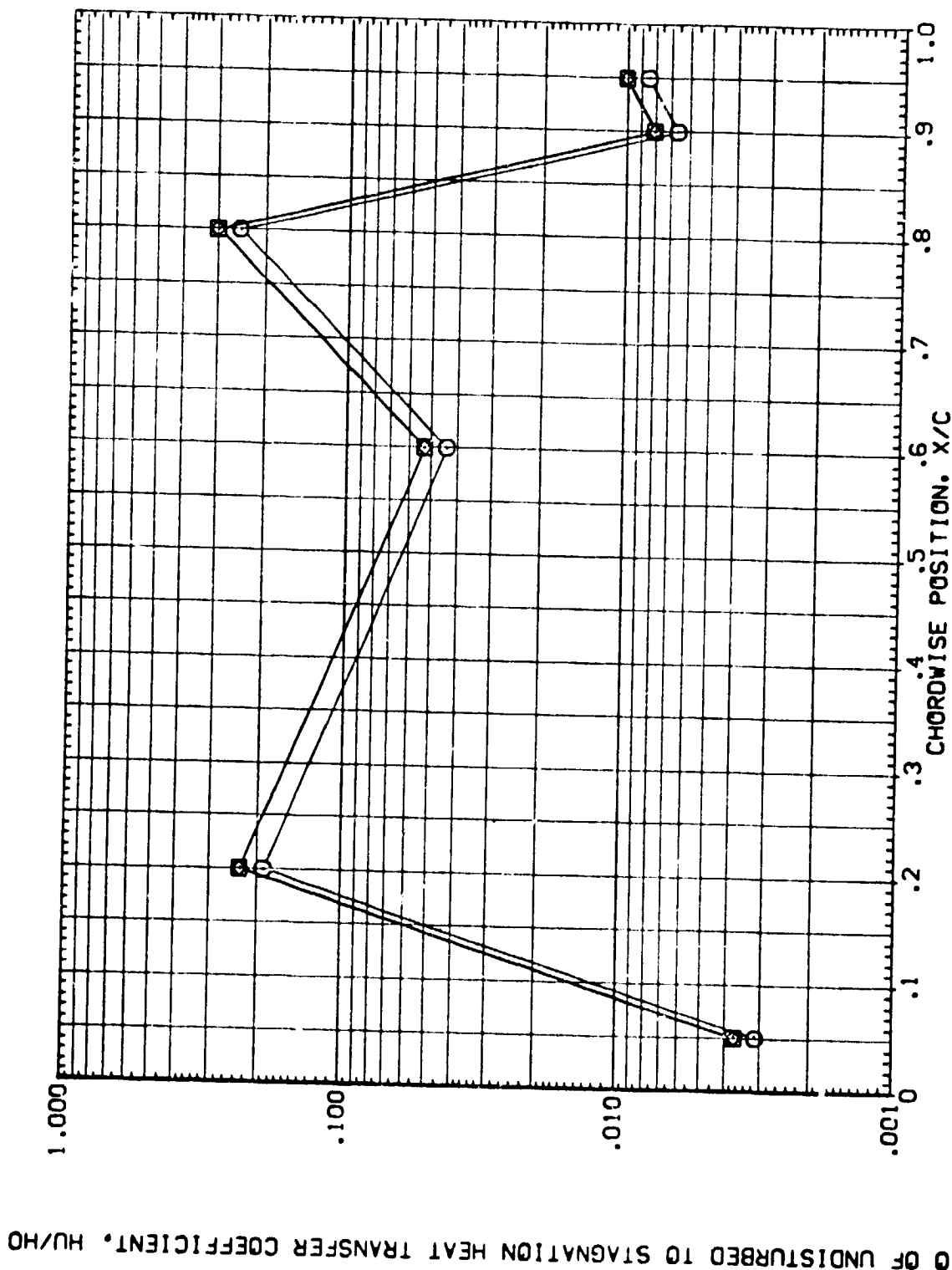


FIGURE 7 HEAT TRANSFER COEFFICIENTS ON UPPER WING SURFACE OF ORBITER.

MACH = 8.000 ALPHA = .000 2Y/B = .600

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MAV/HT	RN/L	BETA	ELEVON
(RTKJ10)	AEDC VA352 0-418 01	1.000	3.720	.000	.000
(ATKJ10)	AEDC VA352 0-418 01	.900	3.720	.000	.000
(CTKJ10)	AEDC VA352 0-418 01	.000	3.720	.000	.000

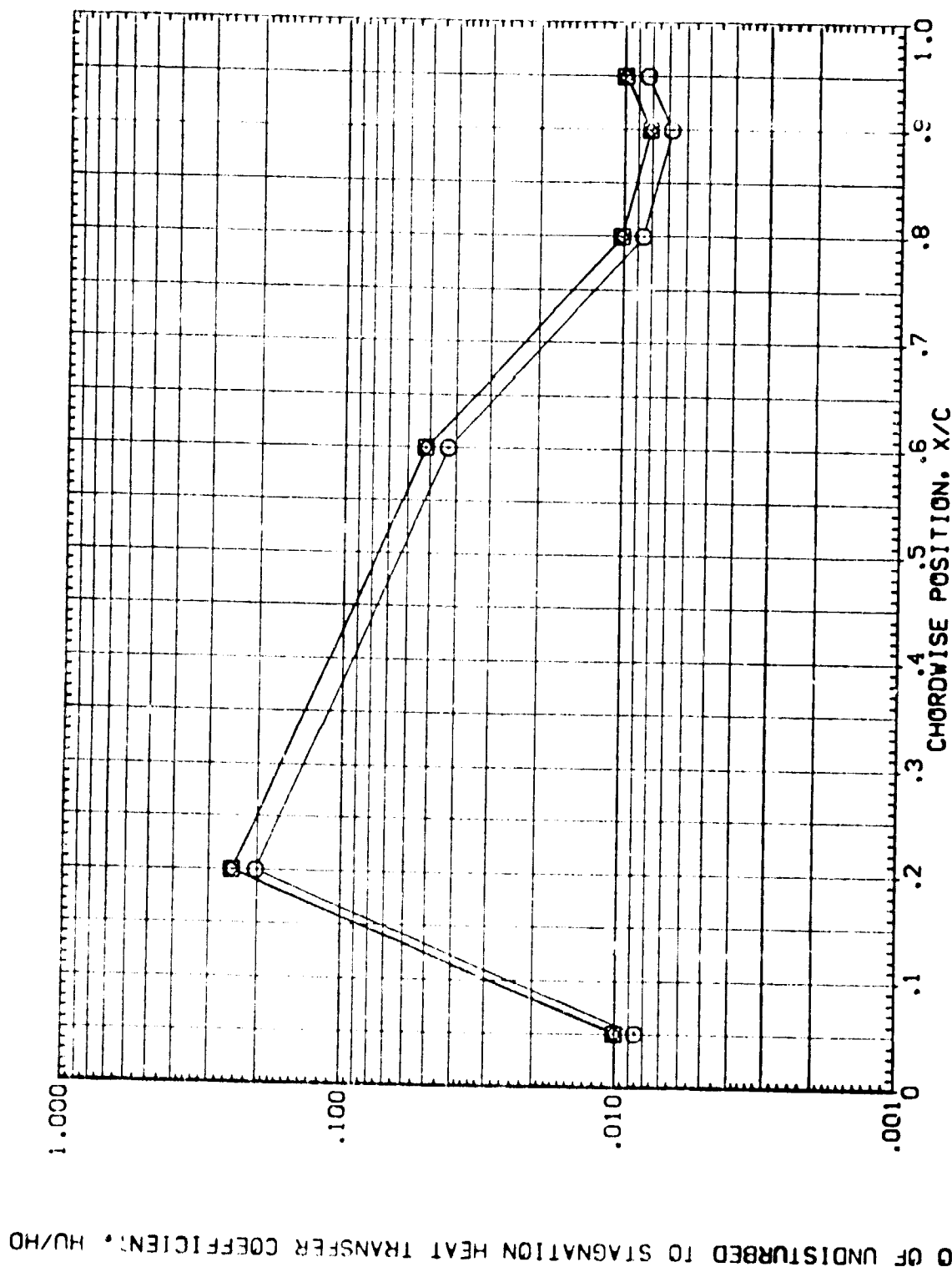


FIGURE 7 HEAT TRANSFER COEFFICIENTS ON UPPER WING SURFACE OF ORBITER.

ORBITER MACH = 8.000 ALPHA = .000 2Y/B = .800

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HAV/HT	RV/L	BETA	ELEVON
(RTKV10)	AEDE VA352 0448 01	1.000	3.720	.000	.000
(ATKV10)	AEDE VA352 0448 01	.900	3.720	.000	.000
(CTKV10)	AEDE VA352 0448 01	.000	3.720	.000	.000

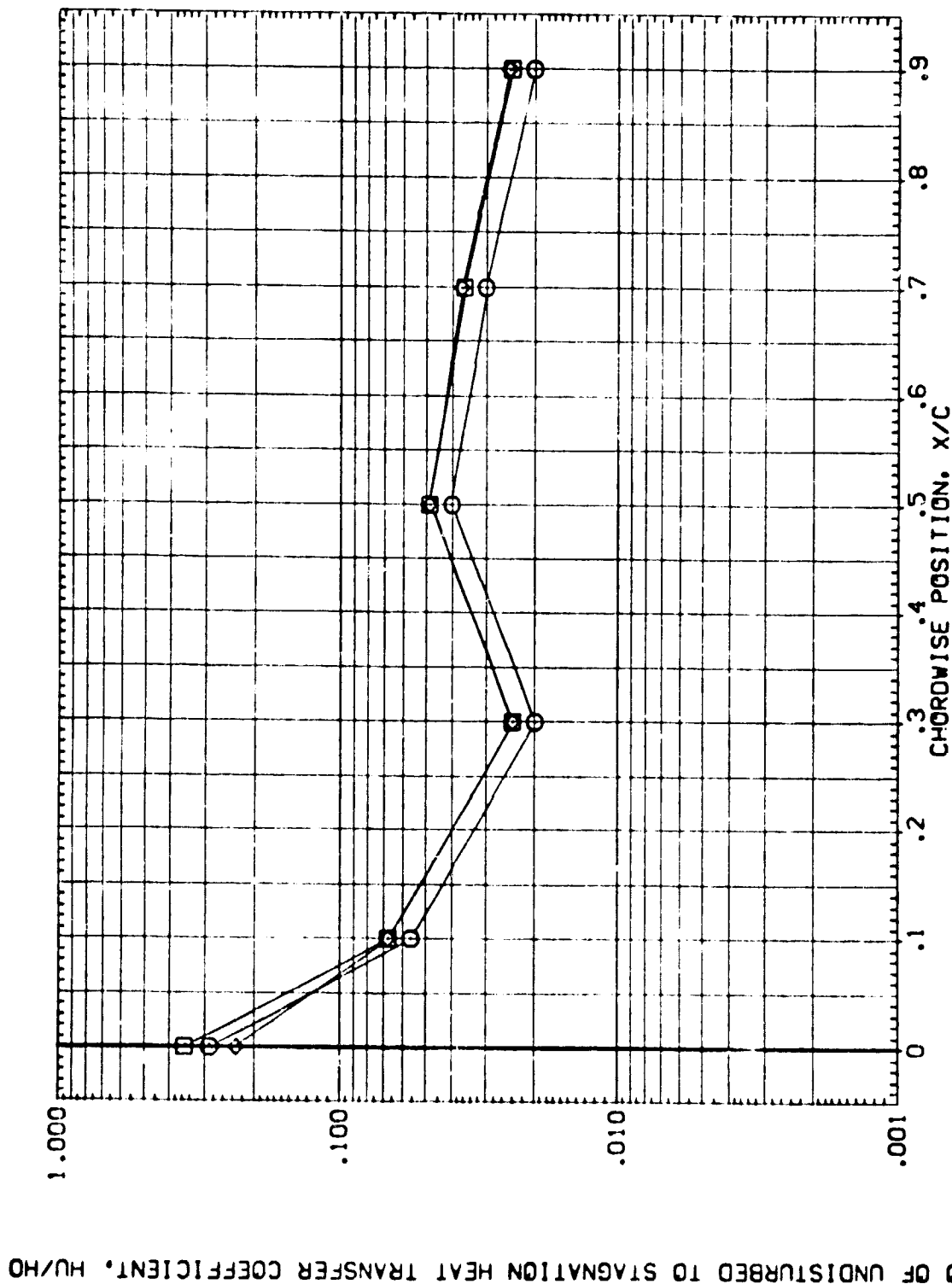


FIGURE 8 HEAT TRANSFER COEFFICIENTS ON LEFT VERTICAL TAIL OF ORBITER.

MACH = 8.000 ALPHA = .000 Z/BV = .299

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HA/WHT	RV/L	BETA	ELEVON
(ATKV10)	AEDC VA352 O-4B O1	1.000	3.720	.000	.000
(ATKV10)	AEDC VA352 O-4B O1	.500	3.720	.000	.000
(CTKV10)	AEDC VA352 O-4B O1	.000	3.720	.000	.000

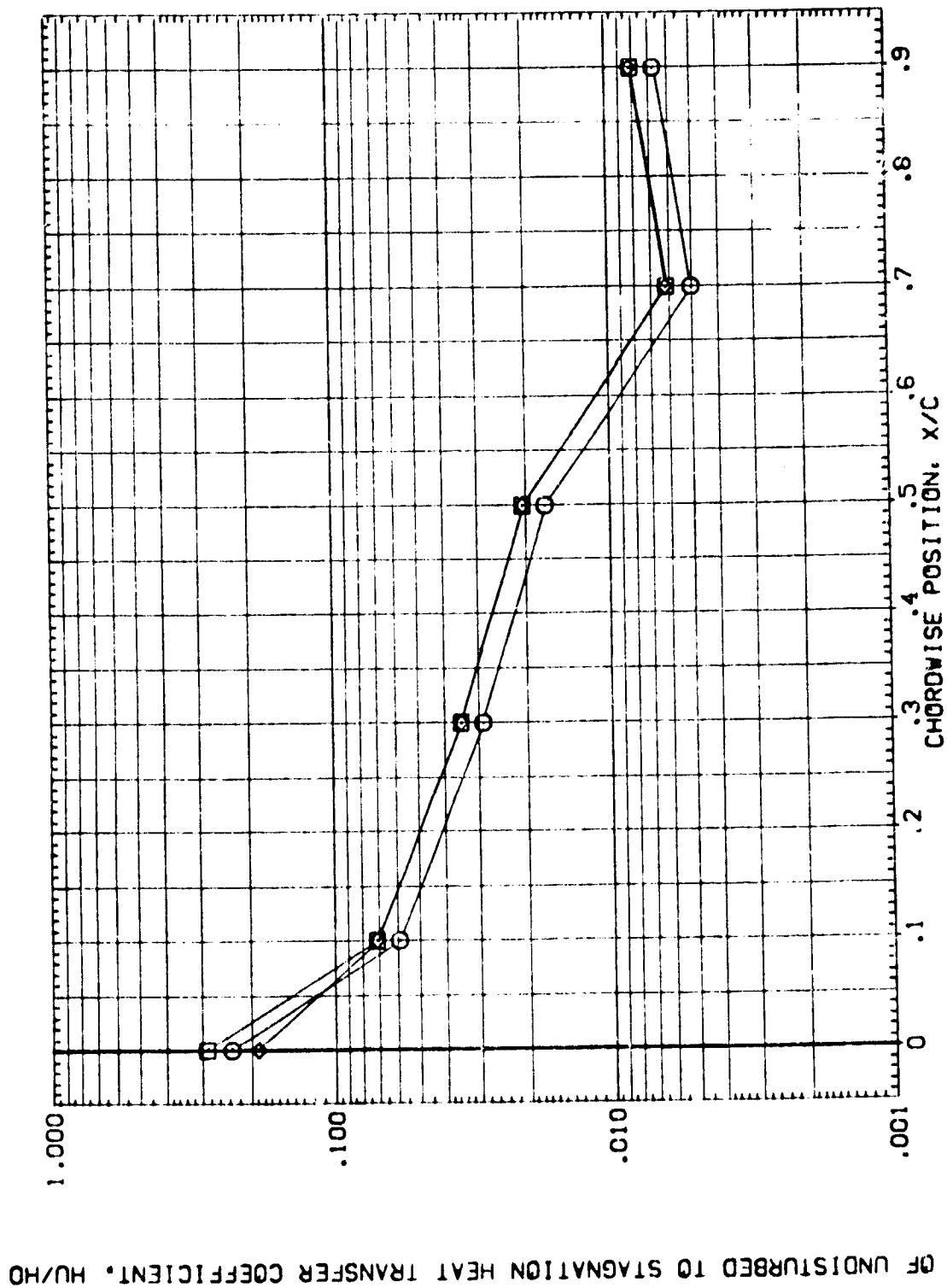


FIGURE 8 HEAT TRANSFER COEFFICIENTS ON LEFT VERTICAL TAIL OF ORBITER.

ORBITER = 8.000 ALPHA = .000 Z/BV = .532

DATA SET SYMBOL : CONFIGURATION DESCRIPTION
 (RTKV10) : AEDC VA352 0-419 01 ORB. LEFT VERTICAL TAIL ELEVON
 (ATKV10) : AEDC VA352 0-418 01 ORB. LEFT VERTICAL TAIL
 (CTKV10) : AEDC VA352 0-413 01 ORB. LEFT VERTICAL TAIL

HAU/HT 1.000
 RV/L 3.720
 BETA .000
 ELEVON .000

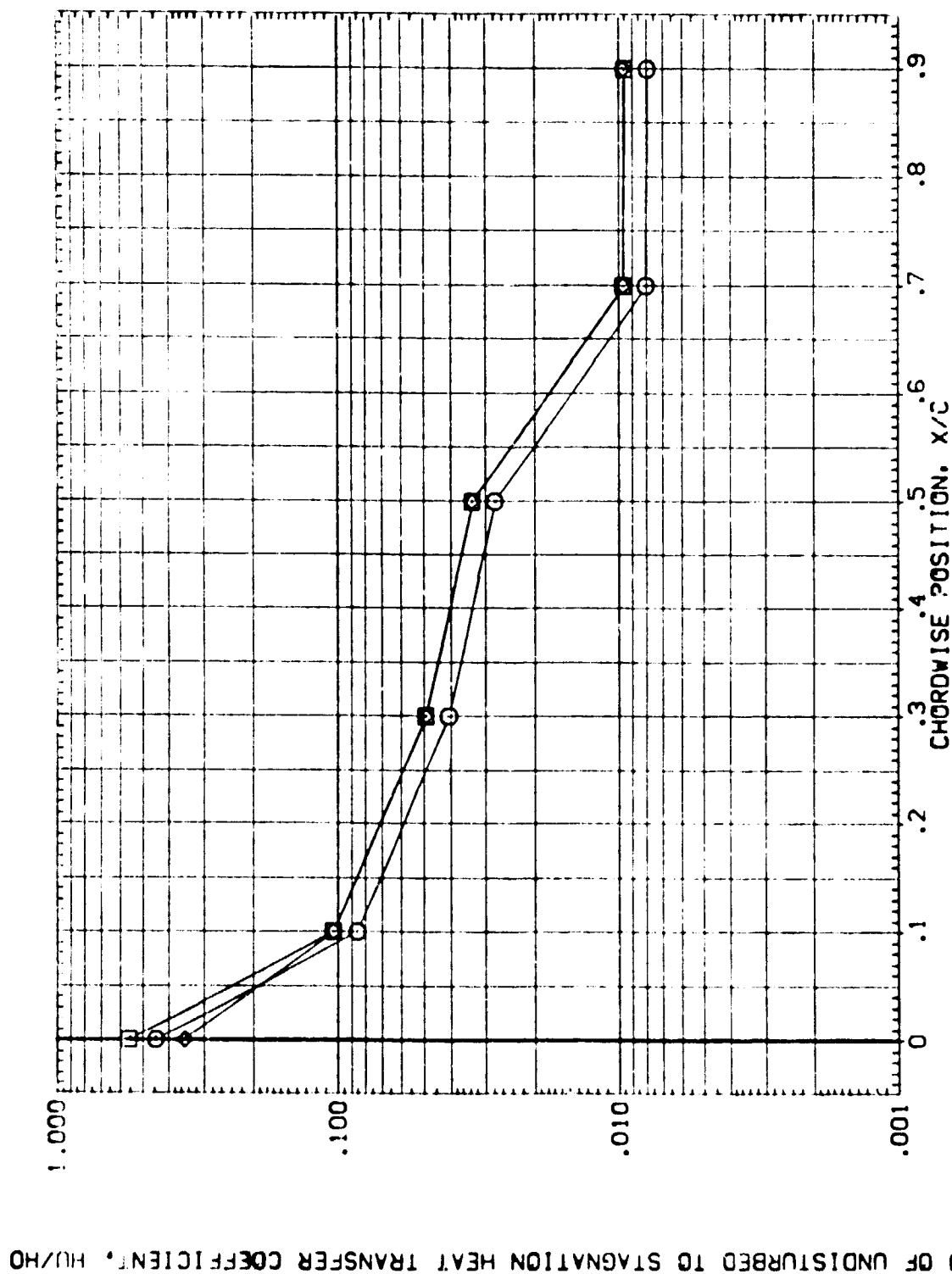


FIGURE 8 HEAT TRANSFER COEFFICIENTS ON LEFT VERTICAL TAIL OF ORBITER.

MACH = 8.000 ALPHA = .000 Z/BV = .725 PAGE 36

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HAV/MT	RN/L	BETA	ELEVON
(RTKQ01)	AEDE VA352 0-418 01-110 058. 0-5 P00	1.000	3.720	.000	.000
(ATKQ01)	AEDE VA352 0-418 01-110 058. 0-5 P00	.900	3.720	.000	.000
(BTQ01)	AEDE VA352 0-418 01-110 058. 0-5 P00	.850	3.720	.000	.000

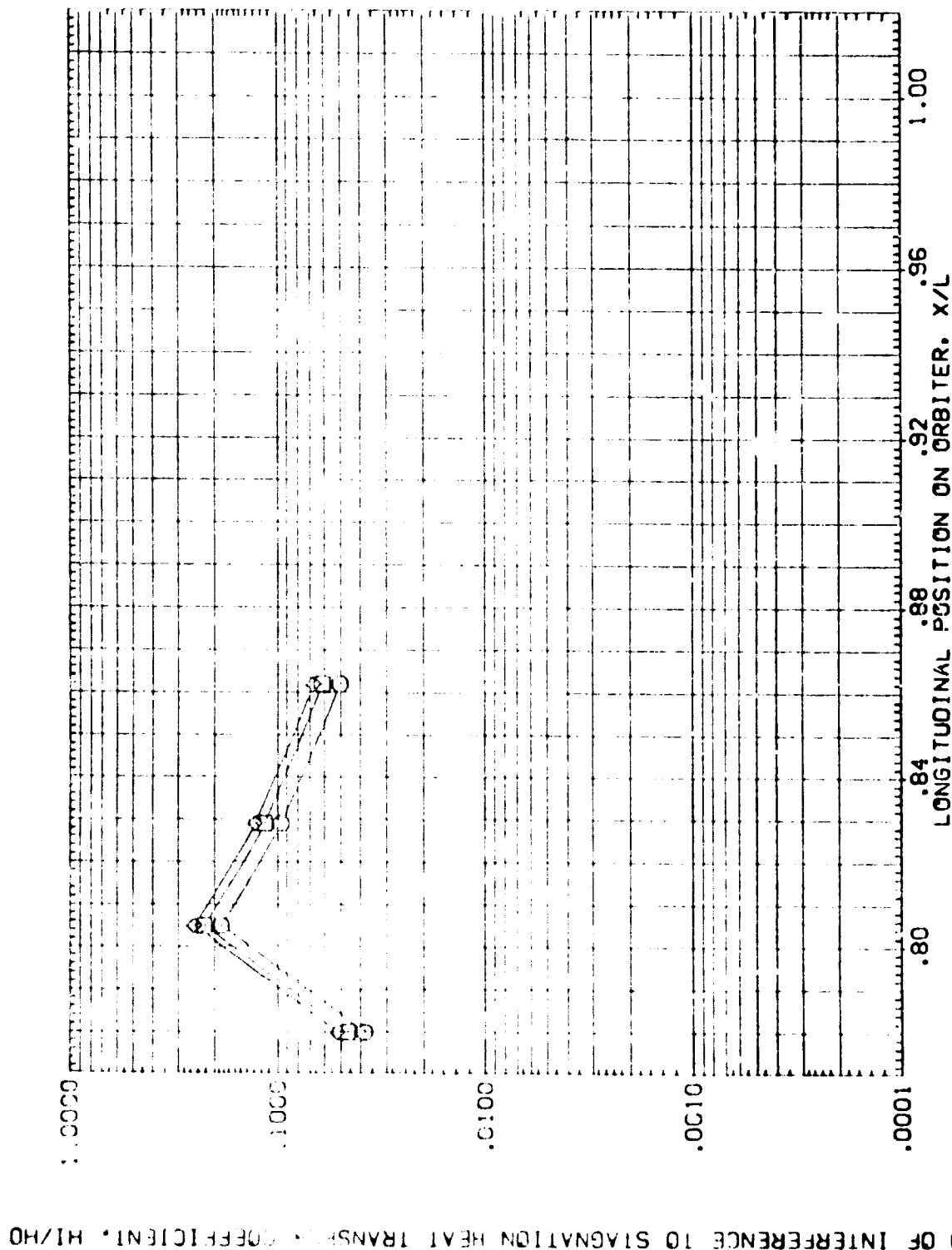


FIGURE 9 HEAT TRANSFER COEFFICIENTS ON ORBITER OMS P00.

MACH = 8.000 ALPHA = .000 Z = 8.295

DATA SET SYMBOL CONFIGURATION DESCRIPTION HAV/HT RN/L BETA ELEVON

(RTKY01) AEDC VA352 0-48 01+T10 088. FUSELAGE Y=0.875 1.000 3.720 .000 .000

(ATKY01) AEDC VA352 0-48 01+T10 088. FUSELAGE Y=0.875 .900 3.720 .000 .000

(BTKY01) AEDC VA352 0-48 01+T10 088. FUSELAGE Y=0.875 .850 3.720 .000 .000

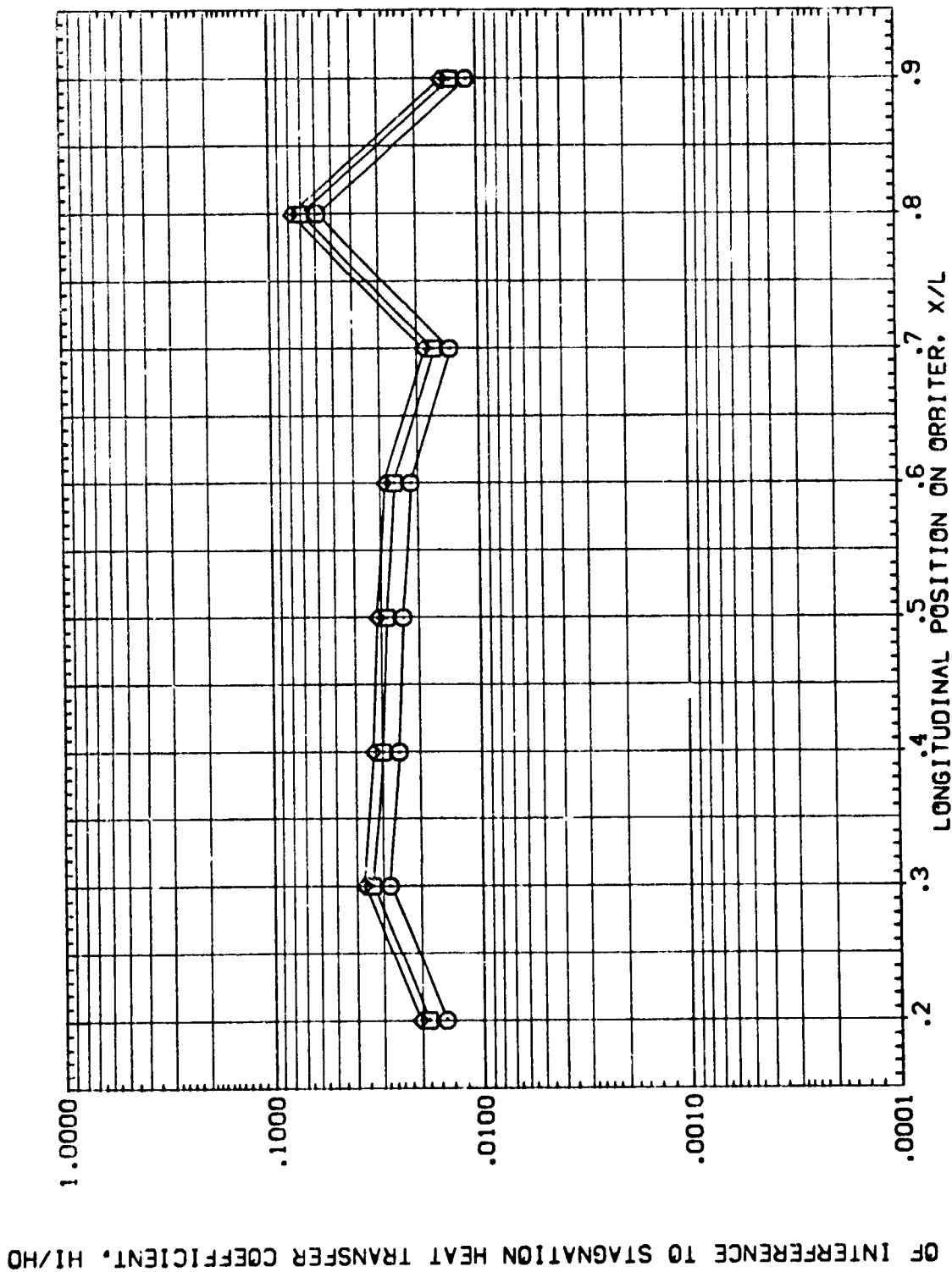


FIGURE 10 HEAT TRANSFER COEFFICIENTS ON ORBITER, Y=0.875.

$\alpha_{HACH} = 8.000$ $\alpha_{PHA} = .000$ $Y = .875$

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MAV/HT	RV/L	BETA	ELEVON
(RTKY10)	AEDC VA352 D-4B 01	1.000	3.720	.000	.000
(ATKY10)	AEDC VA352 D-4B 01	.900	3.720	.000	.000
(CTKY10)	AEDC VA352 D-4B 01	.000	3.720	.000	.000

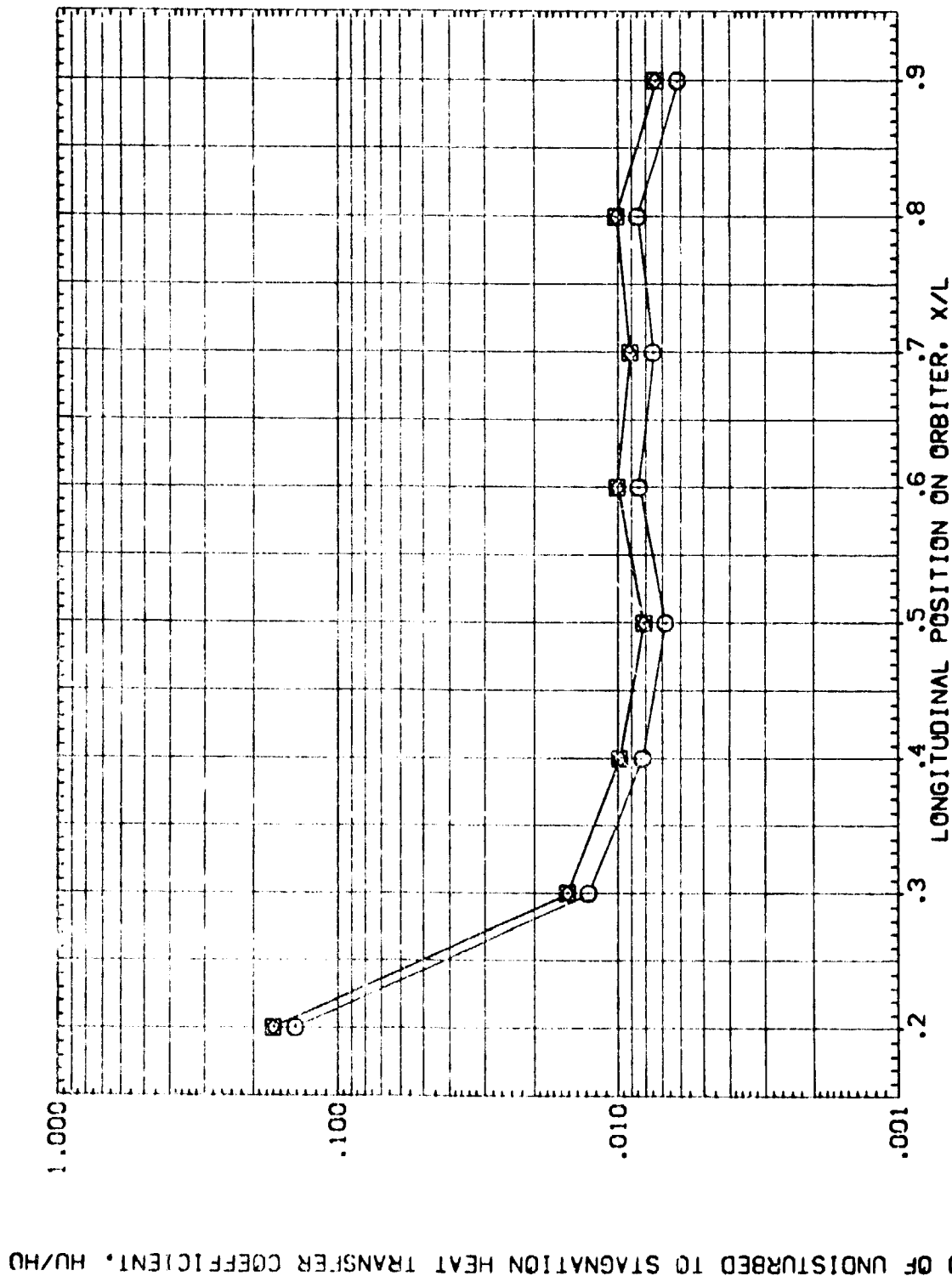


FIGURE 10 HEAT TRANSFER COEFFICIENTS ON ORBITER, $Y=0.875$.

MACH = 8.000 ALPHA = .000 Y = .875

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MAV/HT	RU/L	BETA	ELEVON
(RTKY28)	AEDC VA352 D-HB 02	1.000	3.720	.000	.000
(ATKY28)	AEDC VA352 D-HB 02	.900	3.720	.000	.000
(CTKY28)	AEDC VA352 D-HB 02	.000	3.720	.000	.000

ORB. FUSELAGE Y=0.875
 ORB. FUSELAGE Y=0.875
 ORB. FUSELAGE Y=0.875

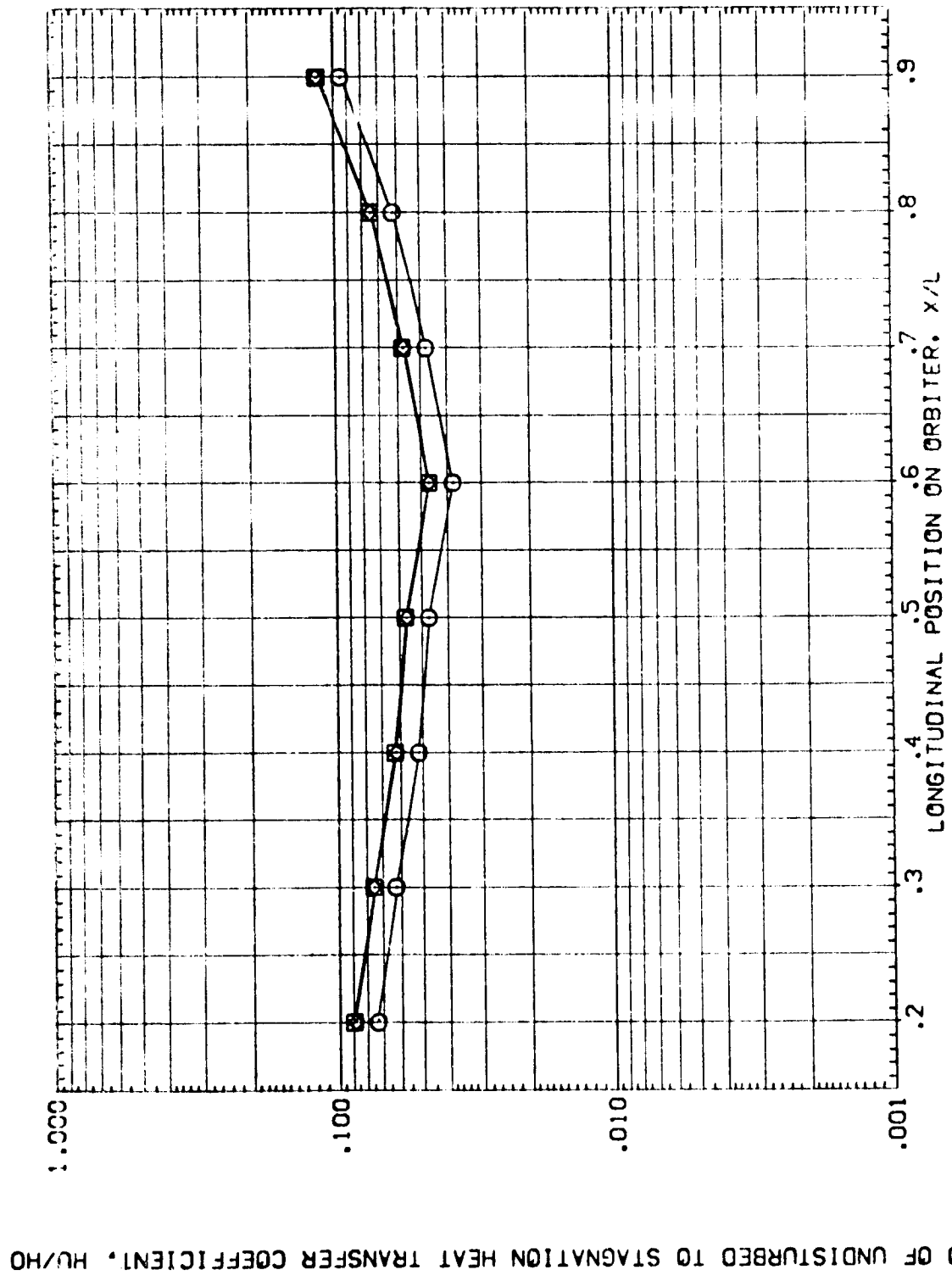


FIGURE 10 HEAT TRANSFER COEFFICIENTS ON ORBITER, Y=0.875.

MACH = 8.000 ALPHA = 25.000 Y = .875 PAGE 40

DATA S ^c	SYMBOL	CONFIGURATION DESCRIPTION	FUSELAGE Z=7.525	HAY/HT	RA/L	BETA	ELEVON
(RTNF10)	□	AEDC VA352 Q-48 01	0.000	1.000	3.720	.000	.000
(ATNF10)	○	AEDC VA352 Q-48 01	0.000	.500	3.720	.000	.000
(CTNF10)	◇	AEDC VA352 Q-48 01	0.000	.000	3.720	.000	.000

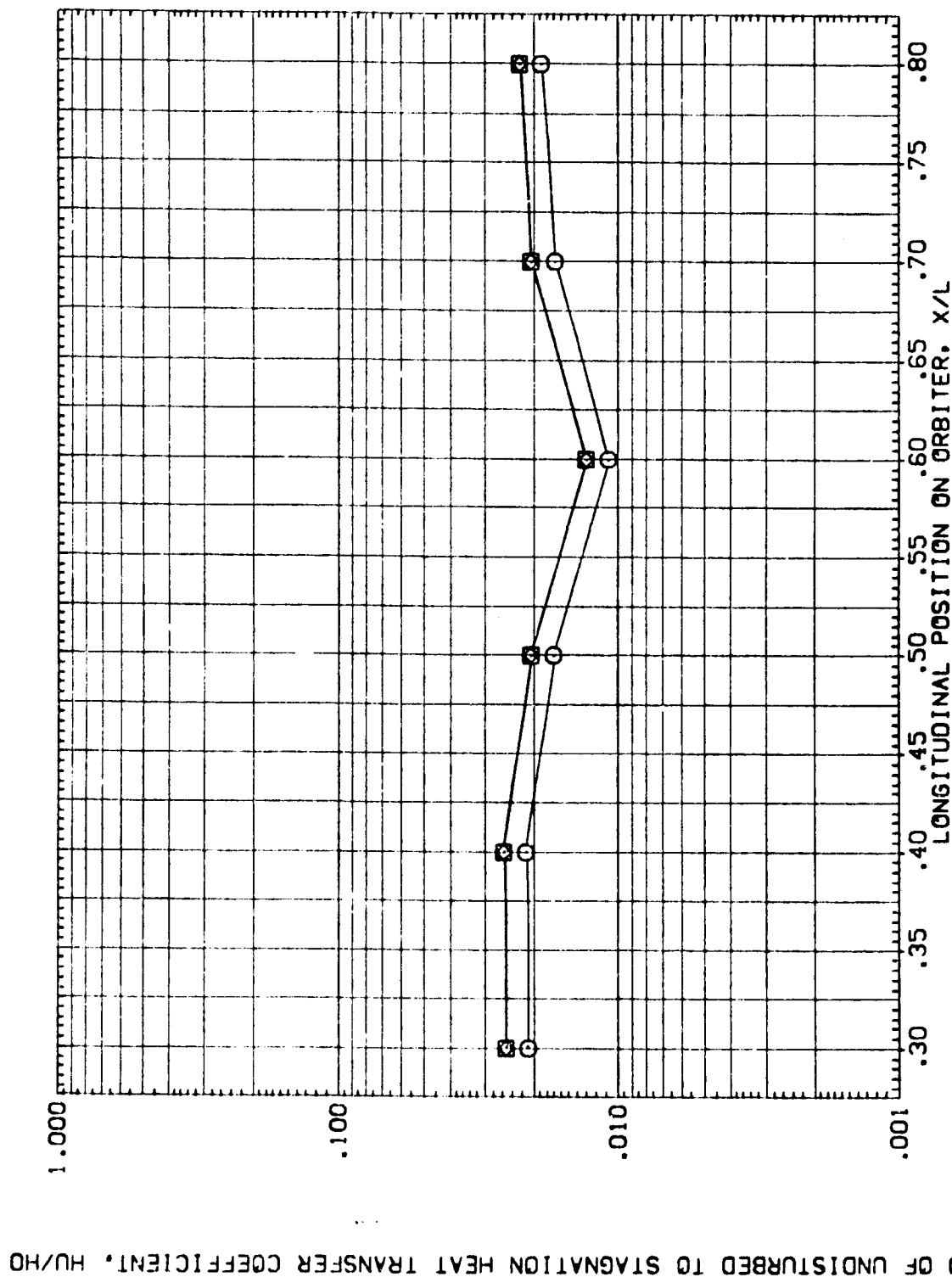


FIGURE 11 HEAT TRANSFER COEFFICIENTS ON ORBITER FUSELAGE, Z=7.525

MACH = 8.000 ALPHA = .000 Z = 7.525



DATA SET SYMBOL CONFIGURATION DESCRIPTION HAV/HT RM/L BETA ELEVON

(RTKX29)	AEDC VA352	OR8. LEFT MAIN NOZZLE	1.000	3.720	.000	.000
(ATKX29)	AEDC VA352	OR8. LEFT MAIN NOZZLE	.900	3.720	.000	.000
(CTKX29)	AEDC VA352	OR8. LEFT MAIN NOZZLE	.000	3.720	.000	.000

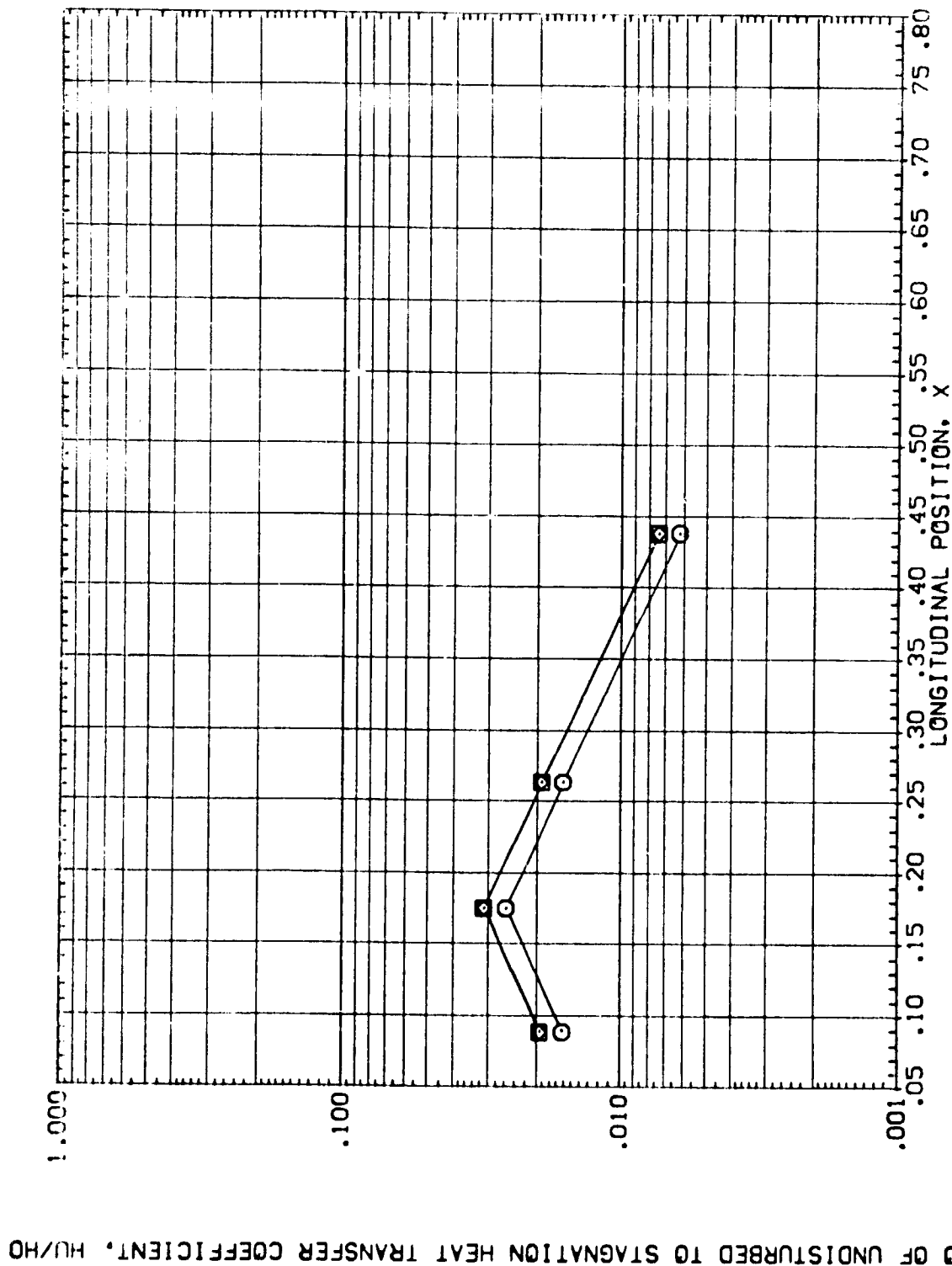


FIGURE 12 HEAT TRANSFER COEFFICIENTS ON ORBITER LEFT MAIN NOZZLE.

MACH = 8.000 ALPHA = 25.000 PHIN = .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RTN028) AEDC W202 0-10 02 ORB. LEFT MAIN NOZZLE
 (ATN028) AEDC W202 0-10 02 ORB. LEFT MAIN NOZZLE
 (ETN028) AEDC W202 0-10 02 ORB. LEFT MAIN NOZZLE

HAWAHT RMVL BETA ELEVON
 1.000 3.720 .000 .000
 .500 3.720 .000 .000
 .000 3.720 .000 .000

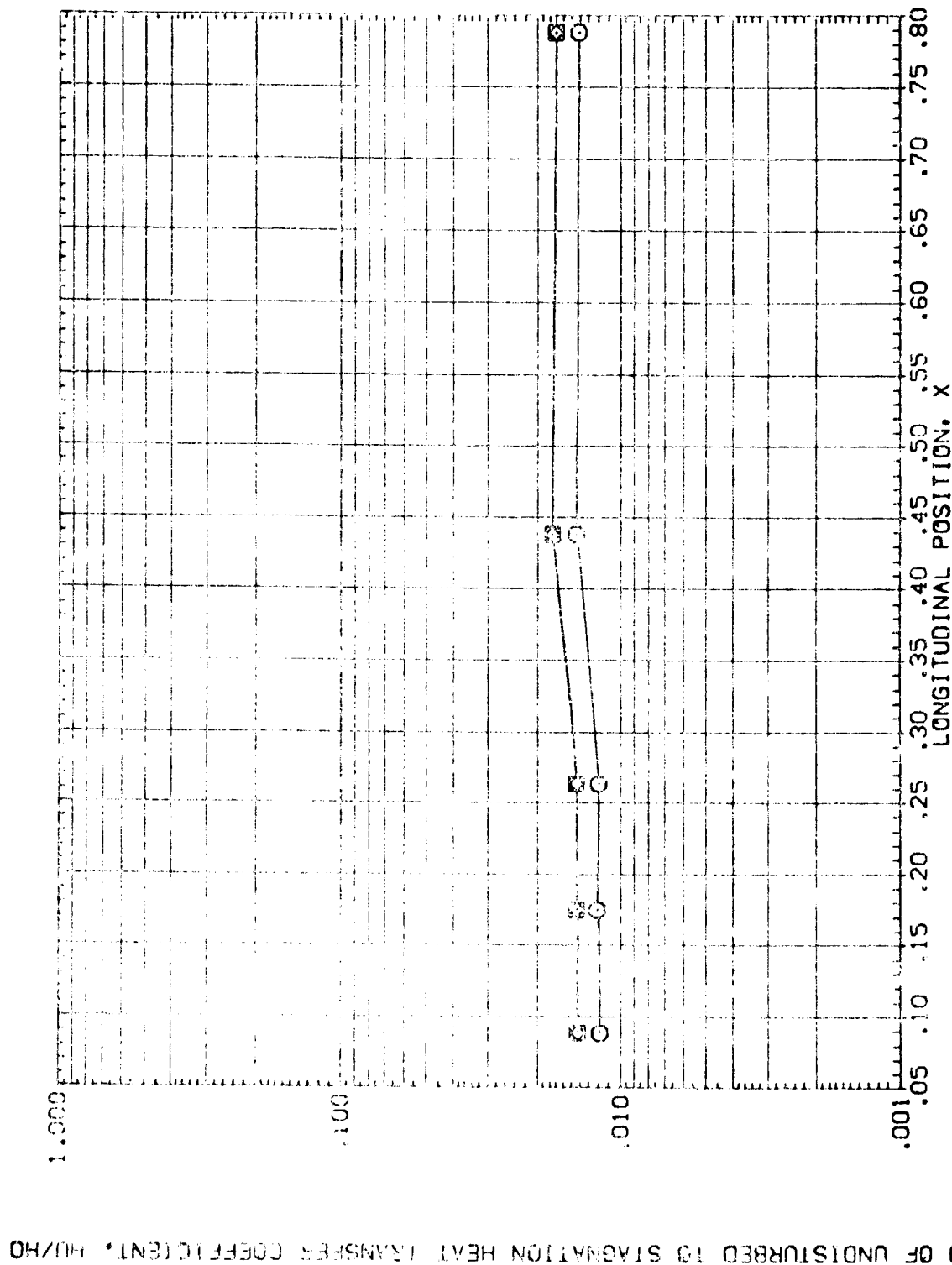


FIGURE 12 HEAT TRANSFER COEFFICIENTS ON ORBITER LEFT MAIN NOZZLE.

MACH = 8.000 ALPHA = 25.000 PHIN = 45.000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HAV/HT	RM/L	BETA	ELEVON
(RMG10)	AEDE VA352 0-4B 01	1.000	3.720	.000	.000
(ATRG10)	AEDE VA352 0-4B 01	.900	3.720	.000	.000
(CTRG10)	AEDE VA352 3-4B 01	.000	3.720	.000	.000

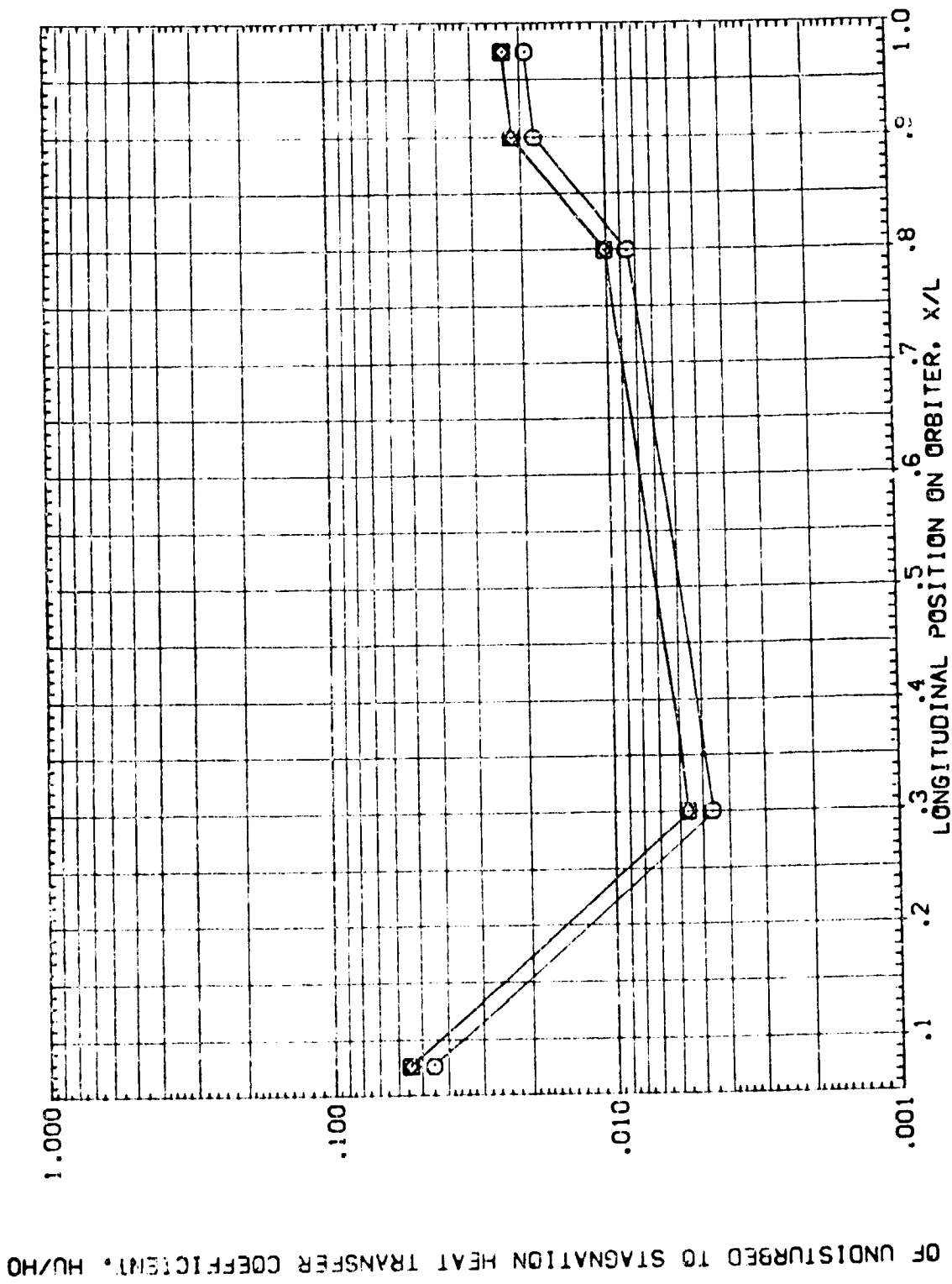


FIGURE 13 HEAT TRANSFER COEFFICIENTS ON ORBITER RCS CENTER.

MACH = 8.000 ALPHA = .000 Z = 6.125

APPENDIX

TABULATED SOURCE DATA

Recovery Factor = 1.0

Components are designated by the 4th character in the dataset identifier.

T	tank
B	orbiter fuselage
L	bottom wing surface
U	upper wing surface
V	vertical tail
N	left main nozzle
R	RCS center
P	base plate
M	OMS pod
Y	orbiter fuselage, $Y = 0.875$
C	wing upper crease
F	orbiter fuselage, $Y = 7.525$

TABULATED DATA LISTING FOR 0448 (AEDC VAS32)

(RTK101)

AEDC VAS32 0448 01+110 EXTERNAL TANK

MACH (1) = 8.000 ALPHA (2) = 4.000

SECTION 1 EXTERNAL TANK DEPENDENT VARIABLE H140

0448 045 0000 87.5000 90.0000 112.5000 123.0000 133.0000 151.0000 157.0000 161.0000 165.0000 180.0000 196.0000 197.0000 208.0000

X/CUT	0096	.0000	.0110	.0000	.0242	.0290	.0000	.0478	.0444
970									
980									
990									
997									
998									
999									

(1974)

AEDC VAS32 C-46 C-1 + HIO EXTERNAL TANK

$$MA(1)(1) = 0.000 \quad A_{P,1}(3) = .000$$

SECRET : 100-442887-1

DEPENDENT VARIABLE: $\ln Y$

0.0000 49.0000 67.5000 90.0000:12.5000:23.0000:35.0000:57.0000:61.0000:63.0000:65.0000:67.0000:69.0000:71.0000:73.0000:75.0000:77.0000:79.0000:81.0000:83.0000:85.0000:87.0000:89.0000:91.0000:93.0000:95.0000:97.0000:99.0000:100.0000

[illegible]

2:16, 1900-22, 5000-229, 5000

[illegible]

$W_{11} = 6,000$	$W_{12} = 5,000$	$W_{13} = 3,935$	$W_{14} = 3,093$
------------------	------------------	------------------	------------------

SECRET : (S) E N T R A - V A R I E

DEPENDENT VARIABLE: HI MO

(R TK T02)

AEDC VA352 CHEMICAL + TIO EXTERNAL TANK

$$\text{MACH} (1) = 0.000 \quad \text{SETA} (2) = .000$$

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE H1 AND

0.0000 43.0000 67.5000 90.0000 112.5000 123.0000 133.0000 131.0000 137.0000 161.0000 165.0000 180.0000 196.0000 197.0000 208.0000

XLT
.900
.925
.935
.937
.960
.975

.0675
.0128
.0374
.0534
.0403

216.6300222.5000229.0000

0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00	7.25	7.50	7.75	8.00	8.25	8.50	8.75	9.00	9.25	9.50	9.75	10.00
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	-------

0266
0146
9500

(RTK103)

AEDC VA352 Q4B 01+T10 EXTERNAL TANK

MACH (1) = 6.000 ALPHA (1) = -10.000

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE HI/HO

PHI 216.0000222.9060229.0000

X/LT

.335	.0201
.400	.0437
.500	.1249
.600	.0067
.700	.0248
.800	.0000

MACH (1) = 6.000 ALPHA (2) = -6.000 T1 = 93.425 Q1 = .682 HREF = .020

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE HI/HO

PHI .0000 45.0000 67.5000 90.0000112.5000123.0000135.0000151.0000157.0000161.0000165.0000170.0000197.0000208.0000

X/LT

.000	.6760
.005	.3576
.010	.5000
.040	.1071
.080	.1606
.120	.0572
.160	.0245
.200	.0128
.250	.0072
.275	.0133
.300	.0104
.325	.0109
.350	.0249
.375	.0040
.400	.0480
.425	.0214
.450	.0302
.475	.0343
.500	.0390
.525	.0345
.550	.0288
.575	.0309
.600	.0326
.625	.0258
.650	.0210
.675	.0182
.700	.0092
.750	.0091
.800	.0091
.825	.0091
.850	.0091
.875	.0091

DATE 23 SEP 74

TABULATED DATA LISTING FOR Q4B (AEDC VA352)

PAGE 11

(RTK103)

AEDC VA352 Q4B9 01+T10 EXTERNAL TANK

WACH (1) = 8.000 ALPHA (2) = -5.000

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE H1/H0

P41 0.000 45.0000 87.5000 90.0000112.5000123.0000135.0000151.0000157.0000165.0000180.0000196.0000197.0000208.0000

X/LT	0.000	.0039	.0000	.0277	.0000	.0136	.0181	.0000	.0071	.0149	.0110
.000											
.025											
.035											
.037											
.040											
.045											
.050											
.060											
.070											
.080											
.090											
.100											
.125											
.150											
.175											
.200											
.225											
.250											
.275											
.300											
.325											
.350											
.375											
.400											
.425											
.450											
.475											
.500											
.525											
.550											
.575											

P41 216.0000222.5000229.0000

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE H1/H0

X/LT	0.000	.0039	.0000	.0277	.0000	.0136	.0181	.0000	.0071	.0149	.0110
.000											
.025											
.035											
.037											
.040											
.045											
.050											
.060											
.070											
.080											
.090											
.100											
.125											
.150											
.175											
.200											
.225											
.250											
.275											
.300											
.325											
.350											
.375											
.400											
.425											
.450											
.475											
.500											
.525											
.550											
.575											

WACH (1) = 8.000 ALPHA (3) = .000 T1 = 93.425 Q1 = .682 HREF = .020

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE H1/H0

P41 0.000 45.0000 87.5000 90.0000112.5000123.0000135.0000151.0000157.0000165.0000180.0000196.0000197.0000208.0000

X/LT	0.000	.0039	.0000	.0277	.0000	.0136	.0181	.0000	.0071	.0149	.0110
.000											
.025											
.035											
.037											
.040											
.045											
.050											
.060											
.070											
.080											
.090											
.100											
.125											
.150											
.175											
.200											
.225											
.250											
.275											
.300											
.325											
.350											
.375											
.400											
.425											
.450											
.475											
.500											
.525											
.550											
.575											



AEDC VA352 OH49 01+T10 EXTERNAL TANK (RTK103)

MACH (1) = 8.000 ALPHA (3) = .000

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE HEAD

P=1 .0000 45.0000 67.5000 90.0000112.5000123.0000135.0000151.0000157.0000161.0000165.0000180.0000196.0000197.0000208.0000

X/LT

.600	.0134	.0227	.0000	.0287	.0061	.0430	.0076	.0323	.0096
.625								.0262	
.650			.0000	.0000	.0000	.0413	.0034	.0240	
.675								.0269	
.700	.0064	.0271	.0121	.0191	.0191	.0328	.0107	.0234	.0119
.725	.0000	.0000	.0000	.0000	.0000	.0233	.0062	.0103	
.750	.0021	.0024	.0125	.0134	.0176	.0156	.0021	.0150	.0067
.775					.0108			.0061	
.800			.0000	.0000	.0000	.0163	.0023		
.825					.0089				
.850	.0073	.0000	.0083	.0000	.0034	.0232	.0000	.0076	.0093
.875					.0000				
.900						.0000			
.925								.0040	
.950								.0061	
.975									
.000									

P=1 216.0000222.5000229.0000

X/LT

.335		.0027							
.400	.0088		.0079						
.450	.0405								
.500			.0044						
.550	.0178								
.600			.0000						

MACH (1) = 8.000 ALPHA (4) = 5.000

T1 = 93.425 Q1 = .682 HREF = .020

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE HEAD

P=1 .0000 45.0000 67.5000 90.0000112.5000123.0000135.0000151.0000157.0000161.0000165.0000180.0000196.0000197.0000208.0000

X/LT

.000								.7095	
.025								.3015	
.050								.3596	
.075								.1507	
.100	.1694							.0847	.0551
.125	.1026							.0247	.0111
.150	.0407							.0106	
.200		.0129						.0044	
.250		.0000							
.275		.0000							
.300	.0096	.0095	.0059	.0000				.0028	.0129
.325		.0000	.0000		.0021				

AEDC VAS32 CHAB 01 + 110 EXTERNAL TANK

(RTKYOM) (23 APR 74)

REFERENCE DATA

REF	=	.6236 S.U.T.	WTW	=	.0000 IN.
REF	=	22.5603 IN.	WTW	=	.0000 IN.
REF	=	16.3919 IN.	WTW	=	.0000 IN.
SCALE	=	10.75 SCALE			

PARAMETRIC DATA

ALPHA	=	.000	RN/L	=	.000
B.F.LAP	=	.000	ELEVON	=	.000
HA/WHT	=	1.000			

$$\begin{aligned} \text{SLOPE} &= (1) = 8,000 & \text{INTERCEPT} &= -2,000 & \text{Y1} &= 93,550 & \text{Y2} &= 681,450 & \text{INTERCEPT} &= 1,020 \end{aligned}$$

SECTION (INTERNAL TANK)

DEPENDENT VARIABLE H1-H3

[illegible]

1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500	2501	2502	2503	2504	2505	2506	2507	2508	2509	2510	2511	2512	2513	2514	2515	2516	2517	2518	2519	2520	2521	2522	2523	2524	2525	2526	2527	2528	2529	2530	2531	2532	2533	2534	2535	2536	2537	2538	2539	2540	2541	2542	2543	2544	2545	2546	2547	2548	2549	2550	2551	2552	2553	2554	2555	2556	2557	2558	2559	2560	2561	2562	2563	2564	2565	2566	2567	2568	2569	2570	2571	2572	2573	2574	2575	2576	2577	2578	2579	2580	2581	2582	2583	2584	2585	2586	2587	2588	2589	2590	2591	2592	2593	2594	2595	2596	2597	2598	2599	2600	2601	2602	2603	2604	2605	2606	2607	2608	2609	2610	2611	2612	2613	2614	2615	2616	2617	2618	2619	2620	2621	2622	2623	2624	2625	2626	2627	2628	2629	2630	2631	2632	2633	2634	2635	2636	2637	2638	2639	2640	2641	2642	2643	2644	2645	2646	2647	2648	2649	2650	2651	2652	2653	2654	2655	2656	2657	2658	2659	2660	2661	2662	2663	2664	2665	2666	2667	2668	2669	2670	2671	2672	2673	2674	2675	2676	2677	2678	2679	2680	2681	2682	2683	2684	2685	2686	2687	2688	2689	2690	2691	2692	2693	2694	2695	2696	2697	2698	2699	2700	2701	2702	2703	2704	2705	2706	2707	2708	2709	2710	2711	2712	2713	2714	2715	2716	2717	2718	2719	2720	2721	2722	2723	2724	2725	2726	2727	2728	2729	2730	2731	2732	2733	2734	2735	2736	2737	2738	2739	2740	2741	2742	2743	2744	2745	2746	2747	2748	2749	2750	2751	2752	2753	2754	2755	2756	2757	2758	2759	2760	2761	2762	2763	2764	2765	2766	2767	2768	2769	2770	2771	2772	2773	2774	2775	2776	2777	2778	2779	2780	2781	2782	2783	2784	2785	2786	2787	2788	2789	2790	2791	2792	2793	2794	2795	2796	2797	2798	2799	2800	2801	2802	2803	2804	2805	2806	2807	2808	2809	2810	2811	2812	2813	2814	2815	2816	2817	2818	2819	2820	2821	2822	2823	2824	2825	2826	2827	2828	2829	2830	2831	2832	2833	2834	2835	2836	2837	2838	2839	2840	2841	2842	2843	2844	2845	2846	2847	2848	2849	2850	2851	2852	2853	2854	2855	2856	2857	2858	2859	2860	2861	2862	2863	2864	2865	2866	2867	2868	2869	2870	2871	2872	2873	2874	2875	2876	2877	2878	2879	2880	2881	2882	2883	2884	2885	2886	2887	2888	2889	2890	2891	2892	2893	2894	2895	2896	2897	2898	2899	2900	2901	2902	2903	2904	2905	2906	2907	2908	2909	2910	2911	2912	2913	2914	2915	2916	2917	2918	2919	2920	2921	2922	2923	2924	2925	2926	2927	2928	2929	2930	2931	2932	2933	2934	2935	2936	2937	2938	2939	2940	2941	2942	2943	2944	2945	2946	2947	2948	2949	2950	2951	2952	2953	2954	2955	2956	2957	2958	2959	2960	2961	2962	2963	2964	2965	2966	2967	2968	2969	2970	2971	2972	2973	2974	2975	2976	2977	2978	2979	2980	2981	2982	2983	2984	2985	2986	2987	2988	2989	2990	2991	2992	2993	2994	2995	2996	2997	2998	2999	3000
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216.0000222,5000229,00000



(RTK108)

AEDC VAS32 QMB T10 EXTERNAL TANK

MACH (1) = 8.000 ALPHA (1) = -10.000

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE MU/NO

PHI 216.0000222,0000229,0000

R/Z

.335	.0502
.400	.0577
.500	.0584
.600	.0115
.700	.0211
.800	.0000

MACH (1) = 8.000 ALPHA (2) = -7.000 T1 = 97.867 31 = 3.957 HREF = .049

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE MU/NO

PHI 2000.45,0000 67.5005 90.0000112,5000123,0000135,0000151,0000157,0000161,0000165,0000169,0000196,0000197,0000208,000

R/Z

.000	.6720
.005	.4140
.010	.6688
.015	.2000
.020	.1012
.025	.0600
.030	.0225
.035	.0107
.040	.0000
.045	.0291
.050	.0112
.055	.0126
.060	.0103
.065	.0418
.070	.3053
.075	.0793
.080	.0207
.085	.0136
.090	.0421
.095	.0311
.100	.0305
.105	.0316
.110	.0276
.115	.0277
.120	.0274
.125	.0270
.130	.0270
.135	.0270
.140	.0270
.145	.0270
.150	.0270
.155	.0270
.160	.0270
.165	.0270
.170	.0270
.175	.0270
.180	.0270
.185	.0270
.190	.0270
.195	.0270
.200	.0270
.205	.0270
.210	.0270
.215	.0270
.220	.0270
.225	.0270
.230	.0270
.235	.0270
.240	.0270
.245	.0270
.250	.0270
.255	.0270
.260	.0270
.265	.0270
.270	.0270
.275	.0270
.280	.0270
.285	.0270
.290	.0270
.295	.0270
.300	.0270
.305	.0270
.310	.0270
.315	.0270
.320	.0270
.325	.0270
.330	.0270
.335	.0270
.340	.0270
.345	.0270
.350	.0270
.355	.0270
.360	.0270
.365	.0270
.370	.0270
.375	.0270
.380	.0270
.385	.0270
.390	.0270
.395	.0270
.400	.0270
.405	.0270
.410	.0270
.415	.0270
.420	.0270
.425	.0270
.430	.0270
.435	.0270
.440	.0270
.445	.0270
.450	.0270
.455	.0270
.460	.0270
.465	.0270
.470	.0270
.475	.0270
.480	.0270
.485	.0270
.490	.0270
.495	.0270
.500	.0270
.505	.0270
.510	.0270
.515	.0270
.520	.0270
.525	.0270
.530	.0270
.535	.0270
.540	.0270
.545	.0270
.550	.0270
.555	.0270
.560	.0270
.565	.0270
.570	.0270
.575	.0270
.580	.0270
.585	.0270
.590	.0270
.595	.0270
.600	.0270
.605	.0270
.610	.0270
.615	.0270
.620	.0270
.625	.0270
.630	.0270
.635	.0270
.640	.0270
.645	.0270
.650	.0270
.655	.0270
.660	.0270
.665	.0270
.670	.0270
.675	.0270
.680	.0270
.685	.0270
.690	.0270
.695	.0270
.700	.0270
.705	.0270
.710	.0270
.715	.0270
.720	.0270
.725	.0270
.730	.0270
.735	.0270
.740	.0270
.745	.0270
.750	.0270
.755	.0270
.760	.0270
.765	.0270
.770	.0270
.775	.0270
.780	.0270
.785	.0270
.790	.0270
.795	.0270
.800	.0270
.805	.0270
.810	.0270
.815	.0270
.820	.0270
.825	.0270
.830	.0270
.835	.0270
.840	.0270
.845	.0270
.850	.0270
.855	.0270
.860	.0270
.865	.0270
.870	.0270
.875	.0270
.880	.0270
.885	.0270
.890	.0270
.895	.0270
.900	.0270
.905	.0270
.910	.0270
.915	.0270
.920	.0270
.925	.0270
.930	.0270
.935	.0270
.940	.0270
.945	.0270
.950	.0270
.955	.0270
.960	.0270
.965	.0270
.970	.0270
.975	.0270
.980	.0270
.985	.0270
.990	.0270
.995	.0270
1.000	.0270

(RTK107)

AEDC VA352 OH-6 T10 EXTERNAL TANK

MACH (1) = 8.000 BETA (2) = .000

SECTION 1: EXTERNAL TANK

DEPENDENT VARIABLE HU/HQ

P-1: .0000 45.0000 67.0000 90.0000 112.0000 125.0000 135.0000 151.0000 157.0000 180.0000 196.0000 197.0000 208.0000

Y/Z =

.000

.000

.000

.000

.000

.000

.000

.0044 .0000 .0159 .0000 .0000 .0232 .0000 .0133 .0201 .0136

.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0426 .0069 .0464

P-1: 216.0000 222.0000 229.0000

X/Z =

.000

.000

.000

.000

.000

.000

.000

.0032 .0240 .0159 .0160 .0160 .0160 .0160 .0000

AEDC VA352 OH4B HIO EXTERNAL TANK

(RTK108) (23 APR 74)

REFERENCE DATA

REF = .8238 SQ.FT. XMRP = .0000 IN.
 LREF = 22.9803 IN. XMRP = .0000 IN.
 BREF = 16.3919 IN. XMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

DELTA = .000 IN/L = .880
 S.F.LAP = .000 ELEVON = .000
 HAW/HT = 1.000

MACH (1) = 9.000 ALPHA (1) = -10.000 TI = 92.367 QI = .870 HREF = .020

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE MU/NO

P1: .0000 45.0000 67.5000 90.0000 112.5000 135.0000 157.5000 180.0000 202.5000 225.0000 247.5000 270.0000 292.5000 315.0000 337.5000 360.0000 382.5000 405.0000 427.5000 450.0000 472.5000 495.0000 517.5000 540.0000 562.5000 585.0000 607.5000 630.0000 652.5000 675.0000 697.5000 720.0000 742.5000 765.0000 787.5000 810.0000 832.5000 855.0000 877.5000 900.0000 922.5000 945.0000 967.5000 990.0000 1012.5000 1035.0000 1057.5000 1080.0000 1102.5000 1125.0000 1147.5000 1170.0000 1192.5000 1215.0000 1237.5000 1260.0000 1282.5000 1305.0000 1327.5000 1350.0000 1372.5000 1395.0000 1417.5000 1440.0000 1462.5000 1485.0000 1507.5000 1530.0000 1552.5000 1575.0000 1597.5000 1620.0000 1642.5000 1665.0000 1687.5000 1710.0000 1732.5000 1755.0000 1777.5000 1800.0000 1822.5000 1845.0000 1867.5000 1890.0000 1912.5000 1935.0000 1957.5000 1980.0000 2002.5000 2025.0000 2047.5000 2070.0000 2092.5000 2115.0000 2137.5000 2160.0000 2182.5000 2205.0000 2227.5000 2250.0000 2272.5000 2295.0000 2317.5000 2340.0000 2362.5000 2385.0000 2407.5000 2430.0000 2452.5000 2475.0000 2497.5000 2520.0000 2542.5000 2565.0000 2587.5000 2610.0000 2632.5000 2655.0000 2677.5000 2700.0000 2722.5000 2745.0000 2767.5000 2790.0000 2812.5000 2835.0000 2857.5000 2880.0000 2902.5000 2925.0000 2947.5000 2970.0000 2992.5000 3015.0000 3037.5000 3060.0000 3082.5000 3105.0000 3127.5000 3150.0000 3172.5000 3195.0000 3217.5000 3240.0000 3262.5000 3285.0000 3307.5000 3330.0000 3352.5000 3375.0000 3397.5000 3420.0000 3442.5000 3465.0000 3487.5000 3510.0000 3532.5000 3555.0000 3577.5000 3600.0000 3622.5000 3645.0000 3667.5000 3690.0000 3712.5000 3735.0000 3757.5000 3780.0000 3802.5000 3825.0000 3847.5000 3870.0000 3892.5000 3915.0000 3937.5000 3960.0000 3982.5000 4005.0000 4027.5000 4050.0000 4072.5000 4095.0000 4117.5000 4140.0000 4162.5000 4185.0000 4207.5000 4230.0000 4252.5000 4275.0000 4297.5000 4320.0000 4342.5000 4365.0000 4387.5000 4410.0000 4432.5000 4455.0000 4477.5000 4500.0000 4522.5000 4545.0000 4567.5000 4590.0000 4612.5000 4635.0000 4657.5000 4680.0000 4702.5000 4725.0000 4747.5000 4770.0000 4792.5000 4815.0000 4837.5000 4860.0000 4882.5000 4905.0000 4927.5000 4950.0000 4972.5000 4995.0000 5017.5000 5040.0000 5062.5000 5085.0000 5107.5000 5130.0000 5152.5000 5175.0000 5197.5000 5220.0000 5242.5000 5265.0000 5287.5000 5310.0000 5332.5000 5355.0000 5377.5000 5400.0000 5422.5000 5445.0000 5467.5000 5490.0000 5512.5000 5535.0000 5557.5000 5580.0000 5602.5000 5625.0000 5647.5000 5670.0000 5692.5000 5715.0000 5737.5000 5760.0000 5782.5000 5805.0000 5827.5000 5850.0000 5872.5000 5895.0000 5917.5000 5940.0000 5962.5000 5985.0000 6007.5000 6030.0000 6052.5000 6075.0000 6097.5000 6120.0000 6142.5000 6165.0000 6187.5000 6210.0000 6232.5000 6255.0000 6277.5000 6300.0000 6322.5000 6345.0000 6367.5000 6390.0000 6412.5000 6435.0000 6457.5000 6480.0000 6502.5000 6525.0000 6547.5000 6570.0000 6592.5000 6615.0000 6637.5000 6660.0000 6682.5000 6705.0000 6727.5000 6750.0000 6772.5000 6795.0000 6817.5000 6840.0000 6862.5000 6885.0000 6907.5000 6930.0000 6952.5000 6975.0000 6997.5000 7020.0000 7042.5000 7065.0000 7087.5000 7110.0000 7132.5000 7155.0000 7177.5000 7200.0000 7222.5000 7245.0000 7267.5000 7290.0000 7312.5000 7335.0000 7357.5000 7380.0000 7402.5000 7425.0000 7447.5000 7470.0000 7492.5000 7515.0000 7537.5000 7560.0000 7582.5000 7605.0000 7627.5000 7650.0000 7672.5000 7695.0000 7717.5000 7740.0000 7762.5000 7785.0000 7807.5000 7830.0000 7852.5000 7875.0000 7897.5000 7920.0000 7942.5000 7965.0000 7987.5000 8010.0000 8032.5000 8055.0000 8077.5000 8100.0000 8122.5000 8145.0000 8167.5000 8190.0000 8212.5000 8235.0000 8257.5000 8280.0000 8302.5000 8325.0000 8347.5000 8370.0000 8392.5000 8415.0000 8437.5000 8460.0000 8482.5000 8505.0000 8527.5000 8550.0000 8572.5000 8595.0000 8617.5000 8640.0000 8662.5000 8685.0000 8707.5000 8730.0000 8752.5000 8775.0000 8797.5000 8820.0000 8842.5000 8865.0000 8887.5000 8910.0000 8932.5000 8955.0000 8977.5000 9000.0000 9022.5000 9045.0000 9067.5000 9090.0000 9112.5000 9135.0000 9157.5000 9180.0000 9202.5000 9225.0000 9247.5000 9270.0000 9292.5000 9315.0000 9337.5000 9360.0000 9382.5000 9405.0000 9427.5000 9450.0000 9472.5000 9495.0000 9517.5000 9540.0000 9562.5000 9585.0000 9607.5000 9630.0000 9652.5000 9675.0000 9697.5000 9720.0000 9742.5000 9765.0000 9787.5000 9810.0000 9832.5000 9855.0000 9877.5000 9900.0000 9922.5000 9945.0000 9967.5000 9990.0000 10012.5000 10035.0000 10057.5000 10080.0000 10102.5000 10125.0000 10147.5000 10170.0000 10192.5000 10215.0000 10237.5000 10260.0000 10282.5000 10305.0000 10327.5000 10350.0000 10372.5000 10395.0000 10417.5000 10440.0000 10462.5000 10485.0000 10507.5000 10530.0000 10552.5000 10575.0000 10597.5000 10620.0000 10642.5000 10665.0000 10687.5000 10710.0000 10732.5000 10755.0000 10777.5000 10800.0000 10822.5000 10845.0000 10867.5000 10890.0000 10912.5000 10935.0000 10957.5000 10980.0000 11002.5000 11025.0000 11047.5000 11070.0000 11092.5000 11115.0000 11137.5000 11160.0000 11182.5000 11205.0000 11227.5000 11250.0000 11272.5000 11295.0000 11317.5000 11340.0000 11362.5000 11385.0000 11407.5000 11430.0000 11452.5000 11475.0000 11497.5000 11520.0000 11542.5000 11565.0000 11587.5000 11610.0000 11632.5000 11655.0000 11677.5000 11700.0000 11722.5000 11745.0000 11767.5000 11790.0000 11812.5000 11835.0000 11857.5000 11880.0000 11902.5000 11925.0000 11947.5000 11970.0000 11992.5000 12015.0000 12037.5000 12060.0000 12082.5000 12105.0000 12127.5000 12150.0000 12172.5000 12195.0000 12217.5000 12240.0000 12262.5000 12285.0000 12307.5000 12330.0000 12352.5000 12375.0000 12397.5000 12420.0000 12442.5000 12465.0000 12487.5000 12510.0000 12532.5000 12555.0000 12577.5000 12600.0000 12622.5000 12645.0000 12667.5000 12690.0000 12712.5000 12735.0000 12757.5000 12780.0000 12802.5000 12825.0000 12847.5000 12870.0000 12892.5000 12915.0000 12937.5000 12960.0000 12982.5000 13005.0000 13027.5000 13050.0000 13072.5000 13095.0000 13117.5000 13140.0000 13162.5000 13185.0000 13207.5000 13230.0000 13252.5000 13275.0000 13297.5000 13320.0000 13342.5000 13365.0000 13387.5000 13410.0000 13432.5000 13455.0000 13477.5000 13500.0000 13522.5000 13545.0000 13567.5000 13590.0000 13612.5000 13635.0000 13657.5000 13680.0000 13702.5000 13725.0000 13747.5000 13770.0000 13792.5000 13815.0000 13837.5000 13860.0000 13882.5000 13905.0000 13927.5000 13950.0000 13972.5000 13995.0000 14017.5000 14040.0000 14062.5000 14085.0000 14107.5000 14130.0000 14152.5000 14175.0000 14197.5000 14220.0000 14242.5000 14265.0000 14287.5000 14310.0000 14332.5000 14355.0000 14377.5000 14400.0000 14422.5000 14445.0000 14467.5000 14490.0000 14512.5000 14535.0000 14557.5000 14580.0000 14602.5000 14625.0000 14647.5000 14670.0000 14692.5000 14715.0000 14737.5000 14760.0000 14782.5000 14805.0000 14827.5000 14850.0000 14872.5000 14895.0000 14917.5000 14940.0000 14962.5000 14985.0000 15007.5000 15030.0000 15052.5000 15075.0000 15097.5000 15120.0000 15142.5000 15165.0000 15187.5000 15210.0000 15232.5000 15255.0000 15277.5000 15300.0000 15322.5000 15345.0000 15367.5000 15390.0000 15412.5000 15435.0000 15457.5000 15480.0000 15502.5000 15525.0000 15547.5000 15570.0000 15592.5000 15615.0000 15637.5000 15660.0000 15682.5000 15705.0000 15727.5000 15750.0000 15772.5000 15795.0000 15817.5000 15840.0000 15862.5000 15885.0000 15907.5000 15930.0000 15952.5000 15975.0000 15997.5000 16020.0000 16042.5000 16065.0000 16087.5000 16110.0000 16132.5000 16155.0000 16177.5000 16200.0000 16222.5000 16245.0000 16267.5000 16290.0000 16312.5000 16335.0000 16357.5000 16380.0000 16402.5000 16425.0000 16447.5000 16470.0000 16492.5000 16515.0000 16537.5000 16560.0000 16582.5000 16605.0000 16627.5000 16650.0000 16672.5000 16695.0000 16717.5000 16740.0000 16762.5000 16785.0000 16807.5000 16830.0000 16852.5000 16875.0000 16897.5000 16920.0000 16942.5000 16965.0000 16987.5000 17010.0000 17032.5000 17055.0000 17077.5000 17100.0000 17122.5000 17145.0000 17167.5000 17190.0000 17212.5000 17235.0000 17257.5000 17280.0000 17302.5000 17325.0000 17347.5000 17370.0000 17392.5000 17415.0000 17437.5000 17460.0000 17482.5000 17505.0000 17527.5000 17550.0000 17572.5000 17595.0000 17617.5000 17640.0000 17662.5000 17685.0000 17707.5000 17730.0000 17752.5000 17775.0000 17797.5000 17820.0000 17842.5000 17865.0000 17887.5000 17910.0000 17932.5000 17955.0000 17977.5000 18000.0000 18022.5000 18045.0000 18067.5000 18090.0000 18112.5000 18135.0000 18157.5000 18180.0000 18202.5000 18225.0000 18247.5000 18270.0000 18292.5000 18315.0000 18337.5000 18360.0000 18382.5000 18405.0000 18427.5000 18450.0000 18472.5000 18495.0000 18517.5000 18540.0000 18562.5000 18585.0000 18607.5000 18630.0000 18652.5000 18675.0000 18697.5000 18720.0000 18742.5000 18765.0000 18787.5000 18810.0000 18832.5000 18855.0000 18877.5000 18900.0000 18922.5000 18945.0000 18967.5000 18990.0000 19012.5000 19035.0000 19057.5000 19080.0000 19102.5000 19125.0000 19147.5000 19170.0000 19192.5000 19215.0000 19237.5000 19260.0000 19282.5000 19305.0000 19327.5000 19350.0000 19372.5000 19395.0000 19417.5000 19440.0000 19462.5000 19485.0000 19507.5000 19530.0000 19552.5000 19575.0000 19597.5000 19620.0000 19642.5000 19665.0000 19687.5000 19710.0000 19732.5000 19755.0000 19777.5000 19800.0000 19822.5000 19845.0000 19867.5000 19890.0000 19912.5000 19935.0000 19957.5000 19980.0000 20002.5000 20025.0000 20047.5000 20070.0000 20092.5000 20115.0000 20137.5000 20160.0000 20182.5000 20205.0000 20227.5000 20250.0000 20272.5000 20295.0000 20317.5000 20340.0000 20362.5000 20385.0000 20407.5000 20430.0000 20452.5000 20475.0000 20497.5000 20520.0000 20542.5000 20565.0000 20587.5000 20610.0000 20632.5000 20655.0000 20677.5000 20700.0000 20722.5000 20745.0000 20767.5000 20790.0000 20812.5000 20835.0000 20857.5000 20880.0000 20902.5000 20925.0000 20947.5000 20970.0000 20992.5000 21015.0000 21037.5000 21060.0000 21082.5000 21105.0000 21127.5000 21150.0000 21172.5000 21195.0000 21217.5000 21240.0000 21262.5000 21285.0000 21307.5000 21330.0000 21352.5000 21375.0000 21397.5000 21420.0000 21442.5000 21465.0000 21487.5000 21510.0000 21532.5000 21555.0000 21577.5000 21600.0000 21622.5000 21645.0000 21667.5000 21690.0000 21712.5000 21735.0000 21757.5000 21780.0000 21802.5000 21825.0000 21847.5000 21870.0000 21892.5000 21915.0000 21937.5000 21960.0000 21982.5000 22005.0000 22027.5000 22050.0000 22072.5000 22095.0000 22117.5000 22140.0000 22162.5000 22185.0000 22207.5000 22230.0000 22252.5000 22275.0000 22297.5000 22320.0000 22342.5000 22365.0000 22387.5000 22410.0000 22432.5000 22455.0000 22477.5000 22500.0000 22522.5000 22545.0000 22567.5000 22590.0000 22612.5000 22635.0000 22657.5000 22680.0000 22702.5000 22725.0000 22747.5000 22770.0000 22792.5000 22815.0000 22837.5000 22860.0000 22882.5000 22905.0000 22927.5000 22950.0000 22972.5000 22995.0000 23017.5000 23040.0000 23062.5000 23085.0000 23107.5000 23130.0000 23152.5000 23175.0000 23197.5000 23220.0000 23242.5000 23265.0000 23287.5000 23310.0000 23332.5000 23355.0000 23377.5000 23400.0000 23422.5000 23445.0000 23467.5000 23490.0000 23512.5000 23535.0000 23557.5000 23580.0000 23602.5000 23625.0000 23647.5000 23670.0000 23692.5000 23715.0000 23737.5000 23760.0000 23782.5000 23805.0000 23827.5000 23850.0000 23872.5000 23895.0000 23917.5000 23940.0000 23962.5000 23985.0000 24007.5000 24030.0000 24052.5000 24075.0000 24097.5000 24120.0000 24142.5000 24165.0000 24187.5000 24210.0000 24232.5000 24255.0000 24277.5000 24300.0000 24322.5000 24345.0000 24367.5000 24390.0000 24412.5000 24435.0000 24457.5000 24480.0000 24502.5000 24525.0000 24547.5000 24570.0000 24592.5000 24615.0000 24637.5000 24660.0000 24682.5000 24705.0000 24727.5000 24750.0000 24772.5000 24795.0000 24817.5000 24840.0000 24862.5000 24885.0000 24907.5000

TABULATED DATA LISTING FOR OH48 (AEDC VAS32)

(PRINTOUT)

OH48 VAS32 OH48 MID EXTERNAL TANK

DEPENDENT VARIABLE HOMO

OH48 VAS32 OH48 MID EXTERNAL TANK

OH48 VAS32 OH48 MID EXTERNAL TANK

OH48 VAS32 OH48 MID EXTERNAL TANK

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OH48 VAS32 OH48 MID EXTERNAL TANK

OH48 VAS32 OH48 MID EXTERNAL TANK

(N74501)

AEDC VAS32 OMB 01-110 ORB, FUELAGE

WACH (1) = 0.000 ALPHA (1) = -10.000

SECTION 1 (1) ORBITER FUELAGE DEPENDENT VARIABLE W140

W/L .1800 .1800 .1900 .2000 .2100 .2200 .2300 .2400 .2500 .2600 .2700 .2800 .2900 .3000 .3100 .3200 .3300 .3400 .3500 .3600 .3700 .3800 .3900 .4000 .4100 .4200 .4300 .4400 .4500 .4600 .4700 .4800 .4900 .5000

P=1

12.000

21.000

29.000

34.000

38.000

41.000

44.000

47.000

50.000

53.000

56.000

59.000

62.000

65.000

68.000

71.000

74.000

77.000

80.000

83.000

86.000

89.000

92.000

95.000

98.000

101.000

104.000

107.000

110.000

113.000

116.000

119.000

122.000

125.000

128.000

131.000

134.000

137.000

140.000

143.000

146.000

149.000

152.000

155.000

158.000

161.000

164.000

167.000

170.000

173.000

176.000

179.000

182.000

185.000

188.000

191.000

P=1

(RTKBD1)

AEDC VAS32 OMB 01+TIC ORS, FUSELAGE

WACH (1) = 0.000 ALPHA (2) = -9.000

SECTION (1) ORS: FUSELAGE

DEPENDENT VARIABLE: N1/40

X/L .1800 .1200 .1300 .1400 .1500 .1600 .1700 .1800 .1900 .2000 .2100 .2200 .2300 .2400 .2500 .2600 .2700 .2800 .2900 .3000 .3100 .3200 .3300 .3400 .3500 .3600 .3700 .3800 .3900 .4000 .4100 .4200 .4300 .4400 .4500 .4600 .4700 .4800 .4900 .5000

P-HI

158.000

159.200

170.700

171.900

173.400

180.000

P-HI

1000

11.500

12.500

21.500

23.000

24.000

31.500

34.000

35.000

40.000

45.000

51.000

57.000

59.000

65.000

70.000

76.000

105.000

106.000

135.000

140.000

141.000

151.000

160.000

P-HI

1000

21.500

63.000

64.000

65.000

69.000

DATE 23 SEP 74

TABULATED DATA LISTING FOR CHAB (AEDC VA352)

PAGE 36

AEDC VA352 CHAB 01+110 OPS. FUSELAGE

(RTK501)

MACH (1) = 0.000 ALPHA (3) = .000

SECTION (1) 110+110 FUSELAGE

DEPENDENT VARIABLE HI/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1550	.1600	.1650	.1690	.1700	.1780	.1800	.1810	.1820
PHI														
.000	.0509	.0493	.0824	.0664	.0592					.0407		.0306		
10.000				.0000										
20.000				.0335										
25.000				.0000										
40.000				.0330										
45.000				.0000										
131.200									.0000					
145.400														.0000
146.500								.0000						.0000
156.000														.0000
159.200														
170.700														
171.300														
173.400														
180.000	.0493			.1152	.0000	.0692			.0000		.0000			.0000
X/L	.1830	.1900	.1910	.2000	.2050	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4750
PHI														
.000	.0765			.0881	.0479	.0536	.0425	.0318	.0279	.0209	.0007	.0234	.0274	.0271
11.500				.0479										
12.000								.0386				.0248		
21.500								.0278						
23.000				.0152										
24.000				.0000										
31.500														
34.000				.0000				.0000						
35.000				.0000				.0000						
40.000				.0000				.0000						
45.000				.0000				.0000						
51.000				.0000				.0000						
59.500														
61.000												.0244		
65.000														
70.000														
98.500				.0000										
105.000														
108.000								.0241				.0194		
135.000								.0000				.0000		
140.000				.0000										
141.400	.0000													
151.000		.0000												
160.000														
X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250
PHI														
.000				.0716	.0000	.0000	.0000	.0000				.0039		



DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-6B (AEDC VA352)

PAGE 38

AEDC VA352 OH-6B 01+710 ORB. FUSELAGE

(RTR801)

MACH (1) = 8.000 ALPHA (4) = 9.000

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE H1/H0

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
OH-1															
42.500								.0000							
48.000								.0000				.0000			
60.000								.0000							
113.000															
180.000			.2443		.1280			.0782		.0822					.0000
															.0431
X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1800	.1700	.1780	.1800	.1810	.1820
OH-1															
.000	.0257		.0327	.0220	.0191		.0160				.0209		.0397		
10.700					.0000										
20.000					.0319										
30.000					.0000										
40.000					.0241										
45.000					.0000										
131.000									.0000						
145.000															.0000
155.000									.0000						
159.000															.0000
170.000															
171.000												.0000			
173.000										.0000					
180.000															
X/L	.0215	.1500	.1910	.2000	.2250	.0466	.2951		.3250	.3750	.4356	.4515	.4250	.4500	.4750
OH-1															
.000	.0222			.0565	.0387	.0374	.0287	.0206	.0181	.0188	.0217	.0219	.0199	.0176	.0161
11.500				.0396											
12.000															
21.500															
23.000															
24.000				.0163				.0280							
31.500				.0000				.0261				.0212			
34.000															
35.000				.0000											
40.000				.0000											
45.000				.0000											
51.000				.0000											
57.500															
59.500															
61.000													.0114		
63.000															
70.000															



(RTK901)

AEDC VA332 CH49 01 + MID ORG. FUSELAGE

$$3,000(1) = 3,000 \quad \text{Alpha (4)} = 3,000$$

SECTION - INDEPENDENT VARIABLE

Yr	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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AEDC VA332 C-4B 01+110 ORS, FUSELAGE

(RTK802) (25 APR 74)

REFERENCE DATA

WEP = .8238 SQ.FT. XMRP = .0000 IN.
 LEP = 22.5603 IN. YMRP = .0000 IN.
 SEP = 15.3015 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 0.000 BETA (1) = -2.000 TI = 97.350 Q1 = 3.942 HREF = .049

PARAMETRIC DATA

ALPHA = .000 RV/L = 3.720
 B.F.LAP = .000 ELEVON = .000
 MAX/HT = 1.000

SECTION (1) ORS: FUSELAGE

DEPENDENT VARIABLE H1/H0

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0800	.0900	.1000
P-H														
.000	.0000	.3258	.2018	.0874	.0685	.0293	.0428	.0685	.0000	.0000	.1234	.1804	.5074	.0000
10.000							.0332						.0819	.0000
14.000							.0375						.0000	.0000
20.000							.0717						.0235	
22.000							.0000							
24.500							.0000							
35.000							.0000							
42.500							.0000							
48.000							.0000							
60.000							.0000							
119.000							.1110			.0772				.0000
140.000							.1630			.1700	.1780	.1800	.1810	.1820
X/L	.1200	.1250	.1300	.1400	.1500	.1550	.1600	.1650	.1670	.1690	.1700	.1780	.1800	.1820
P-H														
.000	.0423		.0425	.0553	.0486	.0427				.0357		.0245		
10.000					.0000									
20.000					.0606									
24.500					.0000									
40.000					.1421									
45.500					.0000				.0000					
101.200														
145.400									.0000					.0000
146.200					.0000									.0000
156.000										.0000				.0000
159.200														
170.700														
171.900														
171.400														
180.000														
X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500
P-H														
.000	.0361	.0346			.1213	.0000	.0126			.7927		.5914		.4751
11.500														.0274



TABULATED DATA LISTING FOR OMB (AEDC VA352)

(RTK802)

SECTION 1: OMB DATA (1) = -2.500

SECTION 2: OMB DATA (2) = -2.500

Y/L	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500	4.750
OMB									
1.000									
2.000									
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TABULATED DATA LISTING FOR OM-9 (AEDC VA352)

AEDC VA352 OM-9 01+110 OFS. FUSELAGE (RTK902)

WACH (1) = 8.0000 BETA (1) = -2.0000

SECTION (1) 01+110 OFS. FUSELAGE DEPENDENT VARIABLE H1/H0

X/L	.8000	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0360	1.0500
P-1												
21.500	.0721	.0249	.0134	.0127	.0085	.0059	.0041	.0000		.0028	.0000	.0028
23.000			.0065									
24.500						.0000						
26.000							.0037					.0081
27.500							.0000					
29.000								.0000				
30.500												
32.000								.0000				
33.500												
35.000												
36.500												
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44.000												
45.500												
47.000												
48.500												
50.000												
51.500												
53.000												
54.500												

WACH (1) = 8.0000 BETA (2) = .0000 T1 = 97.350 Q1 = 3.942 REF = .049

SECTION (1) 01+110 OFS. FUSELAGE DEPENDENT VARIABLE H1/H0

X/L	.8000	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0360	1.0500
P-1												
21.500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23.000												
24.500												
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TABLE 23 SEP 74 TABULATED DATA LISTING FOR O-4B (AEDC VA352)

AEDC VA352 O-4B CLIMB CRB. FUELAGE

(RTK002)

DATA 1 5 6,000 DATA 12 5 1,000

SECTION 11 CRIBS FUELAGE

DEPENDENT VARIABLE H140

1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200

END

1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200

END

1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200

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1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200

END

1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200

END

(RTN502)

AEDC VA352 0448 01+TID ORG. FUSELAGE

WACH (1) = 0.000 BETA (2) = .000

SECTION (1) ENGINE FUSELAGE DEPENDENT VARIABLE H/L/D

WACH	.5000	.6250	.7500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
108.000	.0000				.0000			.0000						.0000
111.000					.0000									
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(RTK503)

AEDC VAS32 Q449 Q1+10 ORS. FUSELAGE

MACH (1) = 0.000 ALPHA (1) = -10.000

SECTION 1:10 ORS. FUSELAGE

DEPENDENT VARIABLE W140

X/Y	.1630	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
W1															
12.000								.0310							
21.500								.0298				.0265			
23.000															
24.000				.0942											
25.000				.0000											
26.000								.0000							
28.000				.0000				.0000							
40.000				.0000				.0000							
45.000				.0000				.0000							
51.000				.0000				.0000							
57.000								.0000				.0264			
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W1



(RTK903)

AEU: VA352 0-40 I + 110 OPS. FUELAGE

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ESTABLISHED 1913

DEPENDENT VARIABLE HIND

Rate	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
0.01												
1.000	.0277	.0146	.0112	.0096	.0083	.0040	.0025	.0000		.0029	.0060	.0031
21.500			.0131									.0042
39.000												
55.000						.0000						
69.000			.0000									
100.000			.0000			.0000						
109.000			.0000			.0000						
112.000					.0000		.0000					
113.000								.0000				

$$\text{MACH} (1) = 0.005 \quad \text{ALPHA} (2) = -5.000$$

تحت إشراف: د. محمد عبد الحليم

DEPENDENT VARIABLE: HIAD

[illegible]

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D

10,000

BOOK

25,500	.0000
40,000	.0274
45,500	.0000
131,200	.0000
145,400	.0000
146,200	.0000

(RTX203)

AEDC VA352 CH4B 01 + 110 ORB. FUSELAGE

$$\text{WACH} (1) = 8.000 \quad \text{ALPHA} (2) = -5.000$$

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE H1AD

[illegible]

AEDC VA352 OH4B CL-110 ORS, FUELSAGE (RTK303)

WACH (1) = 8,000 ALPHA (2) = -9,000

SECTION 110 ORS FUELSAGE DEPENDENT VARIABLE H1/H0

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
P-1															
104,000	.0000				.0000				.0000				.0000		.0000
111,000															
118,000					.0000										
125,000					.0000										
132,000					.0000				.0000		.0000				
139,000	.0000				.0000				.0000		.0000				
146,000					.0000				.0000		.0000				
153,000	.0000				.0000				.0000		.0000				

X/L .8500 .8750 .9000 .9250 .9500 .9750 1.0000 1.0130 1.0140 1.0250 1.0390 1.0500

P-1

100,000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
107,000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
114,000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
121,000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
128,000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
135,000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
142,000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
149,000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
156,000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

WACH (1) = 8,000 ALPHA (3) = .000 Y1 = 93,425 Q1 = .682 W2/P = .020

SECTION 110 ORS FUELSAGE DEPENDENT VARIABLE H1/H0

X/L	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0390	1.0500	1.0630	1.0740	1.0850	1.0960	1.1070
P-1															
100,000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
107,000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
114,000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
121,000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
128,000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
135,000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
142,000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
149,000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
156,000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

X/L

.1200 .1250 .1300 .1400 .1500 .1600 .1670 .1690 .1700 .1780 .1800 .1810 .1820 .1830 .1840 .1850

DATE 23 SEP 74

TABULATED DATA LISTING FOR OH4B (AEDC VA352)

PAGE 50

AEDC VA352 OH4B 01.110 ORB. FUSELAGE
(RTNED03)

MACH (1) = 0.000 ALPHA (3) = .000

SECTION (1) ORBITAL FUSELAGE

DEPENDENT VARIABLE HI/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1700	.1760	.1800	.1810	.1820
PHI														
.000	.0225	.0192	.0201	.0200	.0162					.0161		.0199		
10.000														
20.000														
25.000					.0455									
40.000					.0000									
45.000					.0166									
131.200					.0000									
145.400									.0000					
145.200								.0000						.0000
156.000														.0000
159.200														.0000
170.700														.0000
171.900														.0000
173.400														.0000
180.000														.0000
X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4750
PHI														
.000	.0304	.0498	.0430	.0435	.0664	.0000	.2619			.3677		.2874		
11.500				.0395										
12.000				.0174										
21.500														
23.000														
24.000				.0067										
31.500				.0000										
34.000				.0000										
35.000				.0000										
40.000				.0000										
45.000				.0000										
51.000				.0000										
57.500														
59.500														
61.000														
65.000														
70.000														
96.500				.0000										
101.000														
106.000														
135.000														
140.000				.0000										
141.400														
151.000			.0000											
160.000				.0602	.0000	.0000	.0045							
X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250

DATE 23 SEP 74

TABULATED DATA LISTING FOR OH4B (AEDC VA352)

PAGE 52

(RTK903)

AEDC VA352 OH4B 01+110 ORS. FUSELAGE

WACH (1) = 8.000 ALPHA (4) = 5.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE H1/H0

Y/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0800	.0900	.1000
P=1														
42.500								.0000						
46.000								.0000				.0000		
60.000								.0000						.0000
119.000								.0787			.0931			.0495
160.000		.2425		.1270		.1500	.1560	.1600	.1670	.1690	.1700	.1800	.1810	.1820
P=1														
1200	.0231		.0175	.0170	.0162		.0187				.0210	.0250		
10.000					.0000									.0000
20.000					.0087									.0000
24.500					.0000									.0000
40.000					.0349									.0000
45.000					.0000									.0000
121.000									.0000					
145.000								.0000						
145.000								.0000						
156.000								.0000						
159.000								.0000						
170.000								.0000						
171.000								.0000						
173.000								.0000						
180.000								.0000						
P=1														
1830	.0258		.0190	.0200	.0250	.0200	.0270	.0300	.0320	.0350	.0370	.0400	.0450	.0470
11.000					.0291		.0312			.0235		.0236		
11.000					.0000									
12.000														
21.000														
23.000														
24.000														
31.000														
34.000														
35.000														
40.000														
45.000														
71.000														
77.000														
92.000														
91.000														
93.000														
90.000														



DATE 23 SEP 74 REGULATED DATA LISTING FOR QW4B (AEDC VA352)

(RTK803)

WACH 11 2 8.000 ALPHA (4) 3.000

SECTION 1 (DEPENDENT FUSELAGE DEPENDENT VARIABLE HI/40)

VAL	.1850	.1900	.1950	.2000	.2050	.2100	.2150	.2200	.2250	.2300	.2350	.2400	.2450	.2500	.2550	.2600	.2650	.2700	.2750	.2800	.2850	.2900	.2950	.3000	.3050	.3100	.3150	.3200	.3250	.3300	.3350	.3400	.3450	.3500	.3550	.3600	.3650	.3700	.3750	.3800	.3850	.3900	.3950	.4000	.4050	.4100	.4150	.4200	.4250	.4300	.4350	.4400	.4450	.4500	.4550	.4600	.4650	.4700																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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AEDC VA352 C-49 C-110 ORG. FUSELAGE

(R YK904)

MASS () =	8.000	BETA () =	3.000
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3307-361.3 63a i 56C:1) 461.4.535

DEPENDENT VARIABLE

[illegible]

(RTK804)

AEDC VA332 OH-1B 01+T10 ORR. FUSELAGE

MACH (1) = 0.000 BETA (1) = -2.000

SECTION (1) ORR-1B FUSELAGE DEPENDENT VARIABLE H1/H0

Y/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
0.000	.0217	.0242	.0199	.0101	.0080	.0043	.0020	.0000	.0022	.0000	.0024	.0040
41.9100												
50.000						.0057						
55.000			.0000		.0000							
65.000			.0000		.0000							
68.000			.0000		.0000							
100.000			.0000		.0000							
108.000			.0000		.0000							
112.000					.0000							
113.000								.0000				

MACH (1) = 0.000 BETA (2) = .000 T1 = 93.950 Q1 = .681 HREF = .020

SECTION (1) ORR-1B FUSELAGE DEPENDENT VARIABLE H1/H0

Y/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0800	.1000
PHI													
10.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14.000													
20.000													
22.000													
24.000													
30.000													
35.000													
40.000													
45.000													
50.000													
119.000			.0010		.0000								
180.000													

MACH (1) = 0.000 BETA (2) = .000 T1 = 93.950 Q1 = .681 HREF = .020

SECTION (1) ORR-1B FUSELAGE DEPENDENT VARIABLE H1/H0

Y/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0800	.1000
PHI													
10.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14.000													
20.000													
22.000													
24.000													
30.000													
35.000													
40.000													
45.000													
50.000													
119.000			.0010		.0000								
180.000													



DATE 23 SEP 74

TABULATED DATA LISTING FOR Q-4B (AEDC VA352)

PAGE 61

AEDC VA352 Q-4B 01+110 ORB. FUSELAGE (RTK905)

MACH (1) = 8.000 ALPHA (1) = -10.000

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE HI/HO

X/L	.0500	.0750	.0900	.09250	.09500	.09750	1.0000	1.0100	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
30.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
52.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
65.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
85.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
100.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
109.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
112.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
113.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

MACH (1) = 8.000 ALPHA (2) = -6.000 TI = 98.067 QI = 4.007 HREF = .049

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE HI/HO

X/L	.0600	.0750	.0800	.08200	.08500	.08750	.09000	.09250	.09500	.09750	.09900	.10000
PHI												
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
35.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
39.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
49.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
60.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
119.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
180.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1760	.1800	.1810	.1820
PHI															
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
40.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
45.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
131.200	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
145.400	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
149.200	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

.4609

.4037

.4378

WEDC VA352 3449 01-110 000. FUSELAGE

(continued)

WACH : : = 9.000 A_B-A (3) - .500

SECTION : CODED FOR PAGE SEQUENTLY VARIABLE H/A-C

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931	1930	1929	1928	1927	1926	1925	1924	1923	1922	1921	1920	1919	1918	1917	1916	1915	1914	1913	1912	1911	1910	1909	1908	1907	1906	1905	1904	1903	1902	1901	1900	1899	1898	1897	1896	1895	1894	1893	1892	1891	1890	1889	1888	1887	1886	1885	1884	1883	1882	1881	1880	1879	1878	1877	1876	1875	1874	1873	1872	1871	1870	1869	1868	1867	1866	1865	1864	1863	1862	1861	1860	1859	1858	1857	1856	1855	1854	1853	1852	1851	1850	1849	1848	1847	1846	1845	1844	1843	1842	1841	1840	1839	1838	1837	1836	1835	1834	1833	1832	1831	1830	1829	1828	1827	1826	1825	1824	1823	1822	1821	1820	1819	1818	1817	1816	1815	1814	1813	1812	1811	1810	1809	1808	1807	1806	1805	1804	1803	1802	1801	1800	1799	1798	1797	1796	1795	1794	1793	1792	1791	1790	1789	1788	1787	1786	1785	1784	1783	1782	1781	1780	1779	1778	1777	1776	1775	1774	1773	1772	1771	1770	1769	1768	1767	1766	1765	1764	1763	1762	1761	1760	1759	1758	1757	1756	1755	1754	1753	1752	1751	1750	1749	1748	1747	1746	1745	1744	1743	1742	1741	1740	1739	1738	1737	1736	1735	1734	1733	1732	1731	1730	1729	1728	1727	1726	1725	1724	1723	1722	1721	1720	1719	1718	1717	1716	1715	1714	1713	1712	1711	1710	1709	1708	1707	1706	1705	1704	1703	1702	1701	1700	1699	1698	1697	1696	1695	1694	1693	1692	1691	1690	1689	1688	1687	1686	1685	1684	1683	1682	1681	1680	1679	1678	1677	1676	1675	1674	1673	1672	1671	1670	1669	1668	1667	1666	1665	1664	1663	1662	1661	1660	1659	1658	1657	1656	1655	1654	1653	1652	1651	1650	1649	1648	1647	1646	1645	1644	1643	1642	1641	1640	1639	1638	1637	1636	1635	1634	1633	1632	1631	1630	1629	1628	1627	1626	1625	1624	1623	1622	1621	1620	1619	1618	1617	1616	1615	1614	1613	1612	1611	1610	1609	1608	1607	1606	1605	1604	1603	1602	1601	1600	1599	1598	1597	1596	1595	1594	1593	1592	1591	1590	1589	1588	1587	1586	1585	1584	1583	1582	1581	1580	1579	1578	1577	1576	1575	1574	1573	1572	1571	1570	1569	1568	1
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AEDC VA352 OM4B 01 ORB. FUSELAGE

(RTK010) (25 APR 74)

REFERENCE DATA

STEP = .0238 SQ.FT. XMRP = .0000 IN.
 STEP = 22.5803 IN. XMRP = .0000 IN.
 STEP = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

DELTA = .000 RN/L = 3.720
 B.FLAP = .000 ELEWON = .000
 HAW/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = -5.000 TI = 96.800 OI = 3.961 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .0000 .0050 .0100 .0200 .0250 .0300 .0400 .0500 .0600 .0700 .0750 .0760 .0800 .0900 .1000

PHI

.0000 .0000 .3404 .2165 .0941 .0610 .0448 .0325 .0233 .0000 .0156 .0137 .0117 .0110
 10.000 14.000 .0455
 20.000 .0484
 22.500 .0651
 24.500 .0470
 35.000 .1275
 39.000 .1333
 42.500 .0479
 60.000 .0955
 119.000 .0979
 180.000 .0810

X/L

.1200 .1250 .1300 .1400 .1500 .1560 .1600 .1620 .1670 .1690 .1700 .1780 .1800 .1810 .1820

PHI

.0096 .0089 .0076 .0068 .0106 .0103 .0111 .0163 .0215
 .2776
 .4313
 .3707
 .2752
 .4969

X/L

.1630 .1900 .1910 .2000 .2250 .2500 .2750 .3000 .3250 .3500 .3750 .4000 .4250 .4500 .4750

PHI

.0093 .1652 .3946 .6851
 .0052 .0045 .0034 .0036 .0050 .0073 .0086 .0098 .0106 .0111



DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-6B (AEDC VAS32)

PAGE 67

(RTK810)

AEDC VAS32 OH-6B 01 ORS. FUSELAGE

WACH (1) = 8.000 ALPHA (1) = -9.000

SECTION 1 (DEPENDENT FUSELAGE)

DEPENDENT VARIABLE HC/HO

X/L	.1930	.1950	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
P=1															
12.000								.0037					.0041		
21.500								.0044							
23.000															
24.000				.0025											
31.500				.0072											
34.000								.0039							
35.000				.0079											
40.000				.0116				.0049							
45.000								.0072							
51.000				.0203				.0058							
57.500								.0052							
61.000								.0057							
65.000								.0073							
70.000															
76.500				.0181											
105.000								.0163							
106.000								.0216							
135.000															
140.000				.1608											
141.400	.4037														
151.000															
160.000			.3500												
X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
P=1															
.000	.0114	.0118	.0116	.0117	.0121	.0123	.0114	.0107	.0098	.0093	.0087	.0080	.0081	.0080	
21.500	.0060				.0082				.0142				.0215		
23.000	.0147														
64.000									.0252						
65.000					.0388								.0175		
65.500					.0117				.0266				.0275		
105.000	.0068														.0336
111.000															
112.000					.0079										
113.000					.0094										
115.000															
135.000	.0201				.0276				.0317						
149.000															
160.000	.0431				.0399				.0336						.0410
X/L	.8500	.8750	.9000	.9250	1.0000	1.0130	1.0140	1.0250	1.0360	1.0500					

P=1

DATE 23 SEP 74

TABULATED DATA LISTING FOR OH4B (AEDC VA352)

PAGE 88

(RTMS10)

MAC (1) = 8.000 ALPHA (1) = -5.000
 AEDC VA352 OH4B 01 ORB. FUELSAGE

SECTION (1) ORB. FUELSAGE DEPENDENT VARIABLE HU/HO

X/L	.6500	.8750	.9000	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI										
.000	.0079	.0072		.0038	.0049	.0000		.0051	.0000	.0052
21.500			.0184							
39.000										.0038
52.500				.0598						
65.000			.0268							
83.500			.0321							
99.000			.0347							
106.000			.0363							
112.000				.0281						
115.000				.0081						

.0075

MAC (1) = 8.000 ALPHA (2) = .000 TI = 98.800 Q1 = 3.981 HREF = .049

SECTION (1) ORB. FUELSAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.3693	.2475	.1148		.0778	.0872	.0431	.0320	.0000		.0232	.0200	.0174	.0219
10.000								.0808							
14.000								.0833							
20.000								.0896							
24.500								.0868							
35.000								.1073				.0448			.0415
39.500															
42.500															
48.000															
60.000															
119.000			.6771		.1681		.1580	.1800	.1670	.1690	.1700	.1760	.1800	.1810	.1820
100.000		.1200	.1250	.1300	.1400	.1500	.1580	.1600	.1620	.1670	.1700	.1760	.1800	.1810	.1820
PHI															
.000	.0142	.0126	.0110	.0098		.0090									
10.000				.0159											
20.000				.0188											
24.500				.0206											
40.000				.0218											
45.500				.0257											
131.000															
145.400															
146.200															.3173

.3270

.5208

AEDC VAS32 OMB 01 ORB. FUSELAGE

(RTKSID)

MACH (1) = 8.000 ALPHA (2) = .000

DEPENDENT VARIABLE MU-40

SECTION (1) ORBITER FUSELAGE

X/L .1200 .1250 .1300 .1350 .1400 .1500 .1550 .1600 .1620 .1670 .1700 .1750 .1800 .1810 .1820

PHI

156.000
159.200
170.700
171.900
173.400
180.000

X/L

PHI

.000
11.500
12.000
21.500
23.000
24.000
31.500
34.000
35.000
40.000
45.000
51.000
57.500
59.500
61.000
65.000
70.000
76.500
105.000
106.000
135.000
140.000
141.400
151.000
180.000

.0073
.0085
.0097
.1410
.0146
.0163
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.0162
.0062
.0048
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.0135
.2913
.2443
.5000
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.5800
.6000
.6250
.6500
.6750
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.7500
.7750
.8000
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.6250
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.6750
.7000
.7250
.7500
.7750
.8000
.8250
.8500



(RTK910)

AEFC VA352 'MAG 01 ORG. FUSelage

$$\text{MACH} (1) = 0.000 \quad \text{ALPHA} (2) = .000$$

SECTION (1) CUMULATIVE FUSELAGE

[illegible]

DATE 23 SEP 74
 TABULATED DATA LISTING FOR OMB (AEDC VAS32)
 (RTN811)
 AEDC VAS32 OMB 01 ORB. FUSELAGE

MACH (1) = 0.000 ALPHA (1) = -5.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/NO

Y/L	.1850	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0043				.0037			
21.500								.0055							
33.000				.0068											
34.000				.0092											
35.000				.0097											
36.000				.0134											
42.000				.0206											
51.000								.0051				.0132			
52.000								.0053							
53.000								.0066							
54.000								.0071							
55.000				.0158								.0136			
56.000								.0170				.0104			
57.000								.0246							
58.000				.1028											
59.000								.0047				.0100			
60.000	.1644		.2593	.0636		.0062							.8250	.8250	.8250
61.000	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8250
PHI															
62.000	.0065	.0068	.0076	.0078	.0092	.0091	.0098	.0098	.0102	.0102	.0108	.0108	.0118	.0124	
63.000	.0034			.0037					.0051				.0053		
64.000	.0046								.0164				.0270		
65.000					.0124								.0049		.0072
66.000	.0073				.0031				.0032						
67.000					.0038										
68.000					.0042										
69.000					.0171				.0256		.0052				
70.000	.0069				.0149				.0134		.0199				
71.000	.0139												.0142		
72.000	.0500	.0750	.0000	.9250	.9500	.9750	1.0000	1.0150	1.0140	1.0250	1.0350	1.0500			

PHI



(RTMB11)

AEDC VAS12 QMS 01 ORB. PUSLAGE

WASH (1) = 0.000 ALPHA (2) = .000

SECTION 1: ORBITER PUSLAGE DEPENDENT VARIABLE MU/AC

X/L .1200 .1250 .1300 .1350 .1400 .1500 .1550 .1600 .1650 .1700 .1750 .1800 .1850

QMS

195.000
195.200
195.400
195.600
195.800
196.000

.2604 .1370 .0813 .2144 .2765 .0207 .1716 .1923

QMS

.1450 .1500 .1550 .1600 .1650 .1700 .1750 .1800 .1850 .1900 .1950 .2000 .2050

.0052 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

QMS

.0134 .0137 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134

.0134 .0137 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134

.0134 .0137 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134

.0134 .0137 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134

.0134 .0137 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134

.0134 .0137 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134

.0134 .0137 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134

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.0134 .0137 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134

.0134 .0137 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134 .0134

DATE 23 SEP 74

TABULATED DATA LISTING FOR O-48 (AEDC VA352)

PAGE 75

AEDC VA352 O-48 01 ORS. FUSELAGE (NTK511)

WACH (1) = 6.000 ALPHA (2) = .000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
PHI															
105.000	.0058				.0034				.0036				.0033		.0052
111.000															
112.000					.0081										
113.000					.0068										
116.000											.0053				
135.000	.0070				.0028				.0033		.0070				
149.000															
160.000	.0091				.0110				.0112				.0207		
X/L	.6500	.6750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500			
PHI															
.000	.0025	.0024	.0022	.0025	.0024	.0032	.0021	.0000		.0028	.0000	.0022			
21.500			.0037				.0045						.0032		
39.000						.0762									
52.500															
55.000			.0206												
65.000			.0207												
68.000															
100.000			.0090												
108.000			.0100												
112.000							.0091								
113.000							.0061		.0047						

(RTKS12) (25 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. YMRP = .0000 IN.
 BREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
 S.FLAP = .000 ELEVON = .000
 HAWAHT = 1.000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.400 Q1 = .524 HREF = .018

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI	.0000	.5020	.4120	.2594	.2088	.1759	.1481	.1199	.0000			.1023	.0944	.0864	.0777
10.000															
14.000															
20.000															
22.000															
24.500															
35.000															
39.000															
42.500															
48.000															
60.000															
119.000															
180.000															

X/L

PHI

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI	.0821	.0779	.0736	.0634	.0639	.0621	.0627								
10.000															
10.000															
20.000															
25.500															
40.000															
45.500															
131.000															
145.400															
146.200															
156.000															
159.200															
170.700															
171.900															
173.400															
180.000															

X/L

PHI

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI	.0829	.0869	.0897	.0953	.0934	.1175	.0267								
.000															
11.500															



DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-8 (AEDC VA352)

PAGE 77

(RTKB12)

AEDC VA352 OH-8 01 ORB. FUSELAGE

MACH (1) = 8.000 ALPHA (1) = 25.000

SECTION 1: ORBITER FUSELAGE

DEPENDENT VARIABLE HU/HO

X/L .1830 .1930 .1990 .2000 .2250 .2500 .2750 .3000 .3250 .3500 .3750 .4000 .4250 .4500 .4750

PHI

12.000

21.500

23.000

24.000

31.500

34.000

35.000

40.000

45.000

51.000

57.500

59.500

61.000

65.000

70.000

96.500

105.000

106.000

135.000

140.000

141.400

151.000

180.000

.0546

.0515

.0612

.0761

.0882

.0715

.0714

.0716

.0102

.0208

.0207

.0154

.0124

.0029

.0105

.0017

.0043

.0024

.0029

.0114

.0176

.0064

X/L

PHI

.000

21.500

23.000

24.000

31.500

34.000

35.000

40.000

45.000

51.000

57.500

59.500

61.000

65.000

70.000

96.500

105.000

106.000

135.000

140.000

141.400

151.000

180.000

X/L

PHI

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21.500

23.000

24.000

31.500

34.000

35.000

40.000

45.000

51.000

57.500

59.500

61.000

65.000

70.000

96.500

105.000

106.000

135.000

140.000

141.400

151.000

180.000

X/L

PHI

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21.500

23.000

24.000

31.500

34.000

35.000

40.000

45.000

51.000

57.500

59.500

61.000

65.000

70.000

96.500

105.000

106.000

135.000

140.000

141.400

151.000

180.000

X/L

PHI

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21.500

23.000

24.000

31.500

34.000

35.000

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51.000

57.500

59.500

61.000

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141.400

151.000

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57.500

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59.500

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96.500

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140.000

141.400

151.000

180.000

X/L

PHI

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57.500

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57.500

59.500

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57.500

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96.500

105.000

106.000

135.000

140.000

141.400

151.000

180.000

X/L

PHI

.000

21.500

23.000

24.000

31.500

34.000

35.000

40.000

45.000

51.000

57.500

59.500

61.000

65.000

70.000

96.500

105.000

106.000

135.000

140.000

141.400

151.000

180.000

X/L

PHI

.000

21.500

23.000

24.000

31.500

34.000

35.000

40.000

45.000

51.000

57.500

59.500

61.000

65.000

70.000

96.500

105.000

106.000

135.000

140.000

141.400

151.000

180.000

X/L

PHI

.000

21.500

23.000

24.000

31.500

34.000

35.000

40.000

45.000

51.000

(RTK812)

AE0C VA352 CH4B 01 ORB. FUSELAGE

$$\text{MACH} (1) = 6.000 \quad \text{ALPHA} (1) = 25.000$$

SECTION (1) ORIGINER FUSELAGE

X/\	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
$\sigma=1$												
21.500	.0252	.0254	.0219	.0210	.0171	.0215	.0144	.0000		.0145	.0000	.0136
39.000			.0244									
52.500						.0032						.0215
55.000			.0009									
68.000			.0011			.0012						
100.000			.0015									
125.000			.0031			.0025						
133.000							.0019					.0024

$$\text{MACH} (1) = 8,000 \quad \text{ALPHA} (2) = 30,000 \quad T! = 93,400 \quad Q! = .524 \quad \text{HCF} = .018$$

SECTION 100000 - INTERIOR FINISHES

[illegible]

241	.000	.1003	.0940	.0664	.0817	.0820	.0786	.0772
10,000					.1021			
20,000					.0940			
25,500					.1054			
40,000					.0739			
45,500					.0505			
131,200							.0046	
145,400								.0082
148,200								

(RTK912)

AEBC VA32 249 01 ORG. FUSELAGE

$$WACH : 1) = 0.000 \quad A_{LHA} (2) = 30.000$$

SECTION (1) ORDER PUZZLE	DEPENDENT VARIABLE HUND
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
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50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
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59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

[illegible]

DATE 23 SEP 74

TABULATED DATA LISTING FOR Q448 (AEDC VAS32)

PAGE 61

AEDC VAS32 Q448 01 ORB. FUSELAGE

(RTK912)

MACH (1) = 0.000 ALPHA (3) = 35.000

SECTION 1 SUPERWATER FUSELAGE

DEPENDENT VARIABLE MU/MC

Y/Z	.1200	.1250	.1300	.1400	.1500	.1600	.1620	.1670	.1690	.1700	.1760	.1800	.1810	.1820
PHI														
0.000	.1154		.1134	.1094	.0991	.1002				.0937		.0945		
10.000					.1207									
20.000					.1124									
30.000					.1211									
40.000					.0812									
45.000					.0454									
121.200								.0035						
145.400													.0032	
146.200								.0042						
156.000													.0071	
159.200														.0113
170.700									.0135					
171.900						.0165								
173.400		.0069			.0037					.0733		.0368		
180.000	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.4000	.4250	.4500	.4750
0.000		.0925		.0865	.0000	.0806	.0809	.0724	.0846	.0734	.0736	.0723	.0682	.0666
11.000				.0328				.0804						
12.000								.0698			.0758			
21.000														
23.000														
24.000				.1055										
31.000				.1164				.1008						
34.000														
35.000				.1141				.1001						
40.000				.1041				.0917						
45.000														
51.000				.0383				.0082						
57.000											.0519			
59.000														
61.000								.0162						
65.000								.0176						
70.000								.0186						
98.000				.0181										
105.000											.0147			
106.000														
135.000								.0134						
140.000								.0017						
141.400	.0037		.0083	.0033										
151.000				.0145		.0028		.0019						
160.000									.0017					
Y/Z	.0000	.0250	.0300	.0550	.0800	.0850	.0900	.0750	.0720	.0750	.0750	.0000	.0250	.0250

(RTN913)

AEDC VA352 Q-4B 01 QRS, FUSELAGE

MACH (1) = 6.000 ALPHA (1) = 30.000

SECTION 1 (1) QRS, FUSELAGE DEPENDENT VARIABLE MU/NO

Y/L	1.820	1.900	1.910	2.000	2.250	2.500	2.750	3.000	3.250	3.500	3.750	4.000	4.250	4.500	4.750
PHI															
12.000								.0877				.0816			
21.500								.0756							
23.000															
24.000				.0863											
31.500			.1006												
34.000				.0364				.0854							
35.000				.0960				.0849							
40.000								.0904							
45.000				.0355				.0065				.0023			
51.000								.0170							
52.000								.0180							
53.000								.0169							
59.000												.0104			
70.000				.0181								.0011			
72.000															
73.000				.0036				.0128							
74.000								.0016							
75.000												.0049			
76.000			.0120			.0029									
77.000															
78.000															
79.000															
80.000															
81.000															
82.000															
83.000															
84.000															
85.000															
86.000															
87.000															
88.000															
89.000															
90.000															
91.000															
92.000															
93.000															
94.000															
95.000															
96.000															
97.000															
98.000															
99.000															
100.000															

PHI

AEDC VAS32 Q4B 01 Q4B, FUSELAGE (RTN513)

WIND TUNNEL: 8,000 ALPHA (1) = 30.000

SECTION 1: 1000000 FUSELAGE DEPENDENT VARIABLE MU/MD

WIND TUNNEL	8,000	8,500	9,000	9,500	10,000	10,100	10,140	10,200	10,300	10,500
1000	.0322	.0303	.0284	.0264	.0232	.0184	.0000	.0104	.0000	.0164
21,000			.0297							.0270
30,000						.0329				
42,000					.0038					
55,000			.0003							
68,000			.0007							
81,000			.0007		.0025					
94,000			.0011		.0009					
107,000					.0009					
120,000						.0016				

WIND TUNNEL: 8,000 ALPHA (2) = 35.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION 1: 1000000 FUSELAGE DEPENDENT VARIABLE MU/MD

WIND TUNNEL	8,000	8,500	9,000	9,500	10,000	10,100	10,140	10,200	10,300	10,500
1000	.0322	.0303	.0284	.0264	.0232	.0184	.0000	.0104	.0000	.0164
21,000			.0297							.0270
30,000						.0329				
42,000					.0038					
55,000			.0003							
68,000			.0007							
81,000			.0007		.0025					
94,000			.0011		.0009					
107,000					.0009					
120,000						.0016				

WIND TUNNEL	8,000	8,500	9,000	9,500	10,000	10,100	10,140	10,200	10,300	10,500
1000	.0322	.0303	.0284	.0264	.0232	.0184	.0000	.0104	.0000	.0164
21,000			.0297							.0270
30,000						.0329				
42,000					.0038					
55,000			.0003							
68,000			.0007							
81,000			.0007		.0025					
94,000			.0011		.0009					
107,000					.0009					
120,000						.0016				

WIND TUNNEL	8,000	8,500	9,000	9,500	10,000	10,100	10,140	10,200	10,300	10,500
1000	.0322	.0303	.0284	.0264	.0232	.0184	.0000	.0104	.0000	.0164
21,000			.0297							.0270
30,000						.0329				
42,000					.0038					
55,000			.0003							
68,000			.0007							
81,000			.0007		.0025					
94,000			.0011		.0009					
107,000					.0009					
120,000						.0016				

(27013)

AFSC VA352 0449 01 ONE, FUSELAGE

$$WACH(1) = 0.000 \quad ALPHA(2) = 35.000$$

DEPENDENT VARIABLE: MURDER

[illegible]

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED

(R7K213)

$$3.4 \times 10^{-11} = 9.000 \times 10^{-11} \times 2 = 3.000 \times 10^{-11}$$

THE CENT VARIABE MUO

[illegible][illegible]

Variable	Mean	Standard Deviation	Minimum	Maximum
Age	34.52	10.15	18	65
Gender	1.00	0.00	1	1
Marital Status	1.00	0.00	1	1
Education	12.50	1.50	9	16
Income	1.00	0.00	1	1
Occupation	1.00	0.00	1	1
Religion	1.00	0.00	1	1
Political Affiliation	1.00	0.00	1	1
Health Status	1.00	0.00	1	1
Life Satisfaction	1.00	0.00	1	1
Overall Well-being	1.00	0.00	1	1



Figure 1

Station	Time	Latitude	Longitude	Altitude	Remarks
1	00:00	00°00'	00°00'	0000'	Start of trip
2	00:05	00°05'	00°05'	0005'	First observation
3	00:10	00°10'	00°10'	0010'	Second observation
4	00:15	00°15'	00°15'	0015'	Third observation
5	00:20	00°20'	00°20'	0020'	Fourth observation
6	00:25	00°25'	00°25'	0025'	Fifth observation
7	00:30	00°30'	00°30'	0030'	Sixth observation
8	00:35	00°35'	00°35'	0035'	Seventh observation
9	00:40	00°40'	00°40'	0040'	Eighth observation
10	00:45	00°45'	00°45'	0045'	Ninth observation
11	00:50	00°50'	00°50'	0050'	Tenth observation
12	00:55	00°55'	00°55'	0055'	Eleventh observation
13	01:00	01°00'	01°00'	0100'	End of trip

[illegible]

10

DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA352)

PAGE 89

AEDC VA352 OMB 01 ORG. FUSELAGE

(RTN813)

MACH (1) = 8.000 ALPHA (3) = 40.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
PHI															
.0000	.0741	.0739	.0707	.0700	.0683	.0686	.0685	.0653	.0602	.0610	.0606	.0563	.0542	.0480	
21.500	.0787				.0644				.0660				.0506		
33.000	.0004								.0007				.0004		
44.000													.0008		
55.000					.0004				.0013						.0003
65.500	.0180				.0067										
105.000															
111.000					.0104										
112.000					.0117										
113.000									.0019		.0015				
116.000	.0021				.0024				.0028		.0047				
135.000					.0028				.0026						
149.000	.0026														
160.000															
X/L	.6500	.6750	.7000	.7250	.7500	.7750	1.0000	1.0130	1.0140	1.0250	1.0360	1.0500			
PHI															
.0000	.0466	.0468	.0430	.0411	.0382	.0412	.0314	.0000		.0312	.0000	.0318			
21.500							.0612					.0412			
33.000							.0061								
44.000															
55.000			.0016	.0017			.0028								
65.000			.0017												
69.000															
100.000			.0018												
109.000			.0013												
112.000							.0047	.0068							
113.000								.0073							

AEDC VA352 CHAB 01 OR9. FUSELAGE

(RTK914) (25 APR 74)

REFERENCE DATA

STEP = .0230 S.I.P.T. XMRP = .0000 IN.
 STEP = 22.5803 IN. YMRP = .0000 IN.
 STEP = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

BETA =	,000	PA/L =	2,000
B.FLAP =	,000	ELEVON =	,000
HAW/HT =	1,000		

MACH (1) =	8.000	ALPHA (1) =	30.000	YI =	95.550	QI =	1.994	WEF =	.035
------------	-------	-------------	--------	------	--------	------	-------	-------	------

SECTION (1) ORBITER FUSELAGE

[illegible]

DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA352)

PAGE 91

AEDC VA352 OMB 01 ORB, FUSELAGE

(RTN814)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION 1: ORBITER FUSELAGE DEPENDENT VARIABLE MU/NO

X/L .1830 .1900 .1910 .2000 .2250 .2500 .2750 .3000 .3250 .3500 .3750 .4000 .4250 .4500 .4750

PHI

12.000

21.500

23.000

24.000

31.500

34.000

35.000

40.000

45.000

51.000

57.500

61.000

65.000

70.000

76.500

105.000

106.000

135.000

140.000

141.400

151.000

160.000

X/L

PHI

.000

21.500

63.000

64.000

65.000

65.500

105.000

111.000

112.000

113.000

119.000

135.000

149.000

160.000

X/L

PHI

.0688

.0743

.0840

.0789

.0778

.0888

.0179

.0126

.0013

.0167

.0021

.0092

.0009

.0077

.0024

.0023

.0021

.0034

.0519

.0532

.0451

.0008

.0170

.0324

.0356

.0024

.0054

.0046

.0039

.0069

.0039

.0018

.0004

.0018

.0022

.0484

.0004

.0018

.0020

(RTKS14)

AEDC VA352 OH-8 01 ORB. FUSELAGE

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/H/D

X/L .8500 .8750 .9000 .9250 .9500 .9750 1.0000 1.0130 1.0140 1.0250 1.0380 1.0500

PHI

.000	.0558	.0577	.0571	.0584	.0556	.0692	.0611	.0000	.0649	.0000	.0698
21.500			.0585								
39.000						.0693					.0692
52.500											
65.000			.0012			.0036					
68.000			.0016								
100.000			.0023			.0014					
108.000			.0018			.0017					
112.000						.0022					
113.000								.0035			

MACH (1) = 8.000 ALPHA (2) = 35.000

TI = 95.550 QI = 1.994

WREF = .035

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/H/D

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0800	.0900	.1000
PHI	.0000	.4986	.4313	.2967	.2467	.2161	.1867	.1603	.0000	.1363	.1289	.1182	.1343	
10.000							.2194							
14.000							.2049							
20.000							.0818							
24.500							.0592							
35.000							.0208							
39.000							.0110							
42.500									.0410					
46.000													.0090	
60.000													.0082	
119.000														
180.000														

X/L	.1200	.1250	.1300	.1400	.1500	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI	.1154	.1049	.0999	.0916	.0923	.0906	.0073	.0920						
10.000				.1193										
20.000				.1077										
25.500				.1189										
40.000				.0807										
45.500				.0491										
131.200						.0044								
149.400						.0092								
146.200													.0072	



DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-8 (AEDC VA352)

PAGE 93

(RTK914)

AEDC VA352 OH-8 01 ORB. FUSELAGE

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE H/M/D

X/L .1200 .1250 .1300 .1400 .1500 .1600 .1700 .1800 .1900 .2000 .2250 .2500 .2750 .3000 .3250 .3500 .3750 .4000 .4250 .4500 .4750

PHI

156.000
159.200
170.700
171.900
173.400
180.000

.0089

.0126

X/L

PHI

.0000
11.500
12.000
21.500
23.000
24.000
31.500
34.000
35.100
40.000
45.000
51.000
57.500
59.500
61.000
63.000
70.500
76.500
105.000
106.000
135.000
140.000
141.400
151.000
160.000

.0032

.0077

.0168

.0183

.0195

.0184

.0048

.0105

.0073

.0000

.0029

.0056

.0004

.0000

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(RTK914)

AEDC VA352 OHB 01 ORB, FUSELAGE

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
PHI															
105.000	.0275				.0104				.0040				.0009		
111.000					.0169										.0007
112.000					.0196										
113.000											.0029				
116.000									.0042		.0056				
135.000	.0013				.0022										
149.000									.0013				.0025		
180.000	.0015														
X/L															
.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500				
PHI															
.0000	.0874	.0878	.0932	.0874	.0916	.0952	.0000		.0997	.0000	.1058				
21.500	.0908					.0928					.0316				
39.000						.0054									
52.500			.0007												
55.000		.0007													
65.000		.0006			.0036										
88.000		.0005													
100.000					.0017	.0054									
108.000								.0089							
112.000															
113.000															



(RT1313)

AEDC VA352 OMB 01 OCS, FUELSAGE

MACH (1) = 8.000 ALPHA (1) = 25.000

SECTION (1) OCS, FUELSAGE DEPENDENT VARIABLE H/L/D

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0540				.0511			
21.000								.0809							
23.000															
24.000				.0745											
31.000				.0852											
34.000								.0664							
35.000				.0825				.0645							
40.000				.0846				.0664							
45.000															
51.000				.0339				.0115				.0034			
57.000								.0250							
59.000								.0219							
61.000								.0138							
65.000															
70.000															
76.000				.0161								.0117			
104.000								.0115				.0007			
106.000								.0017							
135.000															
141.000	.0089			.0117											
151.000		.0258										.0079			
160.000								.0020							
X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
PHI															
21.000	.0420	.0420	.0415	.0416	.0430	.0437	.0450	.0460	.0455	.0508	.0532	.0560	.0722	.0815	
21.500	.0485				.0388				.0463				.0630		
63.000	.0014														
64.000									.0009				.0011		
65.000															
65.500					.0018				.0260				.0067		.0076
103.000	.0161				.0364										
111.000					.0231										
112.000					.0210										
113.000															
116.000					.0050				.0046		.0501				
135.000	.0024										.0052				
149.000					.0057				.0049				.0016		
160.000	.0081														
X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0360	1.0500			

PHI



(RTK915)

AE0C VA352 0418 01 070. FUSELAGE

$$\text{MACH} (1) = 0.000 \quad \text{ALPHA} (2) = 30.000$$

SECTION (1) CARRIER FUSELAGE	DEPENDENT VARIABLE MU-10
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
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10	10
11	11
12	12
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14	14
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62	62
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79	79
80	80
81	81
82	82
83	83
84	84
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86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

[illegible]

(RTK815)

AEDC VA332 O-4B 01 ORB. FUSELAGE

MACH (1) = 8.000 ALPHA (2) = 30.000

SECTION (1) ORB. FUSELAGE

DEPENDENT VARIABLE MU/NO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
P-1															
100.000	.0196				.0394				.0083				.0035		.0029
110.000						.0337									
120.000						.0278									
130.000											.0173				
140.000	.0019				.0037			.0046			.0027				
150.000						.0042		.0040					.0028		
160.000															
X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0360	1.0500			

P-1

.0000	.1976	.1687	.1727	.1642	.1433	.1223	.1414	.0000	.1360	.0000	.1369	
21.500		.1716					.1423				.1223	

39.000						.0080						
42.500												
44.000			.0023									
45.000			.0026									
46.000					.0029							
100.000			.0032									
120.000			.0036			.0031	.0022		.0030			
130.000												

MACH (1) = 8.000 ALPHA (3) = 35.000

TI = 57.667 Q1 = 3.955 REF = .049

SECTION (1) ORB. FUSELAGE

DEPENDENT VARIABLE MU/NO

X/L	.0000	.0250	.0500	.0750	.1000	.1250	.1500	.1750	.2000	.2250	.2500	.2750	.3000	.3250	.3500
P-1															
10.000	.0000	.4947	.4319	.2987	.2499	.2142	.1916	.1612	.0000				.1353	.1312	.1208
14.000							.2237							.1346	
20.000							.2092							.1396	
22.000														.1437	
24.500							.0639							.0826	
30.000							.0805								
42.500							.0212					.0426			
46.000															.0065
60.000															.0104
119.000			.0770		.0244		.0106				.0076				
180.000	.1800	.1250	.1300	.1400	.1500	.1580	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1910	.1920

(RTNLS)

AEDC VAS32 QMB 01 QMB, FUSELAGE

MACH (1) = 6.000 ALPHA (3) = 39.000

SECTION (1) QMB FUSELAGE DEPENDENT VARIABLE MU/NO

M/L	.1200	.1250	.1300	.1400	.1500	.1600	.1620	.1670	.1690	.1700	.1760	.1800	.1810	.1820
PHI	.1162	.1110	.1017	.0939	.0941					.0953		.0936		
10.000					.1153									
20.000					.1116									
25.000					.1212									
40.000					.0832									
45.000					.0496									
131.200								.0049						
145.400													.0069	
146.200							.0109							
156.000													.0130	
159.200														.0161
170.700									.0062					
171.900								.0161						
175.400		.0131			.0620	.0696			.0791		.0672			
180.000	.1630	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.4000	.4250	.4500	.4750
PHI	.0966	.0969	.0869	.0869	.0861	.0867	.0807	.0746	.0624	.0770	.0792	.0792	.0763	.0756
11.000			.0920					.0620						
12.000								.0922			.0776			
21.000														
23.000				.1072										
24.000			.1104											
31.000				.1143				.0999						
34.000				.1062				.0964						
39.000				.0360				.0902						
49.000								.0070			.0015			
51.000								.0163						
59.000								.0196						
61.000								.0193						
70.000														
96.000				.0160							.0147			
108.000								.0131						
108.000								.0006						
135.000				.0092										
140.000														
141.400	.0076													
151.000		.0130		.0122		.0017		.0013						
160.000										.0019				
M/L	.9000	.9250	.9500	.9750	.9900	.9950	.9950	.9950	.9950	.9950	.9950	.9950	.9950	.9950



UNCLASSIFIED DATA LISTING FOR OMB (AEDC VA352)

(R7K915)

REF ID: A63522

$$\text{MACH} (1) = 0.000 \quad \text{ALPHA} (3) = 35.000$$

DATE OF DEPARTURE: 10/10/2011

[illegible]

AEDC VAS352 OH-13 Q1 ORB. FUSELAGE

(RTN316) (25 APR 74)

REFERENCE DATA

REF = .4238 SQ.FT. WMP = .0000 IN.
 REF = 22.5803 IN. WMP = .0000 IN.
 REF = 16.3919 IN. WMP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
 S.FLAP = .000 ELEVON = .000
 HAW/HT = 1.000

MACH (1) = 3.000 ALPHA (1) = 30.000 TI = 97.500 Q1 = 3.958 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HAW/HT

X/L	PHI	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0800	.0900	.1000
.000	.0000	.0000	.4237	.2733	.2262	.1953	.1684	.1412	.0000	.0700	.0750	.0760	.0800	.0900	.1000
10.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
30.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
32.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
34.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
36.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
38.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
40.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
42.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
44.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
46.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
48.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
52.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
54.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
56.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
58.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
60.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
62.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
64.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
66.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
68.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
70.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
72.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
74.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
76.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
78.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
80.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
82.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
84.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
86.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
88.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
90.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
92.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
94.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
96.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
98.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
100.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000



DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-8 (AEDC VAS32)

PAGE 103

AEDC VAS32 OH-8 01 ORB. FUSELAGE (RTRE16)

MACH (1) = 0.000 ALPHA (1) = 30.000

SECTION 4 (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/MO

X/L	.1630	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
#H1															
12.000								.0000							
21.500								.0747				.0640			
23.000															
24.000			.0910												
31.500			.0000												
34.000								.0000							
35.000				.0000											
40.000				.0000				.0000							
45.000				.0000				.0000							
51.000				.0000				.0000							
57.500								.0000							
59.500								.0000				.0000			
61.000								.0000				.0000			
65.000								.0000				.0000			
70.000								.0000				.0000			
76.500				.0000											
105.000								.0000				.0000			
116.000								.0000				.0000			
135.000								.0000				.0000			
140.000				.0000				.0000				.0000			
141.000						.0168						.0000			
151.000								.0000				.0000			
150.000								.0000				.0000			
X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
#H1															
100.000	.0275	.0550	.0608	.0642	.0685	.0754	.0843	.0925	.1048	.1207	.1386	.1463	.1797	.1943	
21.500	.0591				.0610				.1117				.1788		
23.000	.0000								.0000				.0000		
34.000					.0000				.0000				.0000		
35.000	.0000				.0000				.0000				.0000		
105.000	.0000				.0000				.0000				.0000		
111.000					.0000				.0000				.0000		
112.000					.0000				.0000				.0000		
113.000					.0000				.0000				.0000		
116.000					.0000				.0000				.0000		
135.000	.0000				.0000				.0000				.0000		
149.000					.0000				.0000				.0000		
150.000	.0000				.0000				.0000				.0000		
X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0360	1.0500			

#H1

(RTN818)

AEDC VA352 OM4B 01 ORB. FUSELAGE

MACH (1) = 0.000 ALPHA (1) = 30.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X%	.6500	.6750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
0.000	.1919	.1836	.1773	.1618	.1456	.0000	.1419	.0000	.1351	.0000	.1368	.0000
21.500			.1788									
39.000						.0000						
52.500						.0000						
75.000			.0000									
85.000			.0000									
89.000						.0000						
100.000			.0000									
105.000			.0000			.0000						
112.000						.0000						
115.000							.0000					



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA332)

PAGE 109

AEDC VA332 OMB Q1 ORB. FUSELAGE

(RTMB17) (25 APR 74)

REFERENCE DATA

STEP = .0238 IN. XMRP = .0000 IN.
 STEP = .0238 IN. XMRP = .0000 IN.
 STEP = .0238 IN. XMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.500 ALPHA (1) = 30.000

TI = 97.700 Q1 = 3.949 HREF = .049

PARAMETRIC DATA

BETA = .000 TAIL = 3.720
 S.F.LAP = 10.000 ELEVON = 5.000
 HAWAHT = 1.000

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE H/M/O

X/L .0000 .0050 .0100 .0200 .0250 .0300 .0400 .0500 .0600 .0700 .0750 .0800 .0900 .1000

P=1 .000 .0000 .0004 .4237 .2792 .2285 .1936 .1689 .1420 .0000 .1186 .1123 .1020 .1020

10.000 .0000 .0004 .4237 .2792 .2285 .1936 .1689 .1420 .0000 .1186 .1123 .1020 .1020

14.000 .0000 .0004 .4237 .2792 .2285 .1936 .1689 .1420 .0000 .1186 .1123 .1020 .1020

20.000 .0000 .0004 .4237 .2792 .2285 .1936 .1689 .1420 .0000 .1186 .1123 .1020 .1020

22.000 .0000 .0004 .4237 .2792 .2285 .1936 .1689 .1420 .0000 .1186 .1123 .1020 .1020

24.500 .0000 .0004 .4237 .2792 .2285 .1936 .1689 .1420 .0000 .1186 .1123 .1020 .1020

35.000 .0000 .0004 .4237 .2792 .2285 .1936 .1689 .1420 .0000 .1186 .1123 .1020 .1020

73.000 .0000 .0004 .4237 .2792 .2285 .1936 .1689 .1420 .0000 .1186 .1123 .1020 .1020

42.500 .0000 .0004 .4237 .2792 .2285 .1936 .1689 .1420 .0000 .1186 .1123 .1020 .1020

45.000 .0000 .0004 .4237 .2792 .2285 .1936 .1689 .1420 .0000 .1186 .1123 .1020 .1020

60.000 .0000 .0004 .4237 .2792 .2285 .1936 .1689 .1420 .0000 .1186 .1123 .1020 .1020

110.000 .0000 .0004 .4237 .2792 .2285 .1936 .1689 .1420 .0000 .1186 .1123 .1020 .1020

190.000 .0000 .0004 .4237 .2792 .2285 .1936 .1689 .1420 .0000 .1186 .1123 .1020 .1020

X/L .1200 .1250 .1300 .1400 .1500 .1560 .1600 .1620 .1670 .1690 .1700 .1760 .1800 .1820

P=1 .000 .0989 .0899 .0892 .0775 .0778 .0760 .0766 .0760 .0766 .0760 .0766 .0766 .0766

10.000 .0000 .0989 .0899 .0892 .0775 .0778 .0760 .0766 .0760 .0766 .0760 .0766 .0766

20.000 .0000 .0989 .0899 .0892 .0775 .0778 .0760 .0766 .0760 .0766 .0760 .0766 .0766

25.500 .0000 .0989 .0899 .0892 .0775 .0778 .0760 .0766 .0760 .0766 .0760 .0766 .0766

40.000 .0000 .0989 .0899 .0892 .0775 .0778 .0760 .0766 .0760 .0766 .0760 .0766 .0766

45.500 .0000 .0989 .0899 .0892 .0775 .0778 .0760 .0766 .0760 .0766 .0760 .0766 .0766

131.200 .0000 .0989 .0899 .0892 .0775 .0778 .0760 .0766 .0760 .0766 .0760 .0766 .0766

145.400 .0000 .0989 .0899 .0892 .0775 .0778 .0760 .0766 .0760 .0766 .0760 .0766 .0766

146.200 .0000 .0989 .0899 .0892 .0775 .0778 .0760 .0766 .0760 .0766 .0760 .0766 .0766

156.000 .0000 .0989 .0899 .0892 .0775 .0778 .0760 .0766 .0760 .0766 .0760 .0766 .0766

170.700 .0000 .0989 .0899 .0892 .0775 .0778 .0760 .0766 .0760 .0766 .0760 .0766 .0766

171.900 .0000 .0989 .0899 .0892 .0775 .0778 .0760 .0766 .0760 .0766 .0760 .0766 .0766

173.400 .0000 .0989 .0899 .0892 .0775 .0778 .0760 .0766 .0760 .0766 .0760 .0766 .0766

190.000 .0000 .0989 .0899 .0892 .0775 .0778 .0760 .0766 .0760 .0766 .0760 .0766 .0766

X/L .1630 .1900 .1910 .2000 .2230 .2500 .2730 .3000 .3230 .3500 .3750 .4000 .4250 .4500 .4750

P=1 .000 .0752 .0711 .0000 .0670 .0656 .0591 .0655 .0664 .0653 .0636 .0615 .0586 .0566

11.500 .0000 .0752 .0711 .0000 .0670 .0656 .0591 .0655 .0664 .0653 .0636 .0615 .0586 .0566

(RTK817)

AEDC VA352 Q448 01 ORB, FUSELAGE

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L	.1630	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0883				.0851			
21.500								.0732							
23.000															
24.000				.0912											
31.500				.1026											
34.000								.0853							
35.000				.0989											
40.000				.0959				.0818							
45.000								.0805							
51.000				.0351											
57.500								.0089							
59.500												.0022			
61.000								.0203							
65.000								.0211							
70.000								.0176							
76.500				.0176											
105.000												.0067			
106.000								.0127							
135.000								.0011				.0008			
140.000				.0056											
141.400	.0043														
151.000			.0166												
190.000							.0026					.0030			
X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
PHI															
.000	.0268	.0589	.0528	.0649	.0691	.0756	.0860	.0973	.1079	.1237	.1420	.1502	.1790	.1962	
21.500	.0602				.0606			.1155					.1791		
63.000	.0006								.0003				.0005		
64.000															
65.000					.0010								.0005		
65.500					.0362				.0078				.0035		
105.000	.0193														.0030
111.000															
112.000					.0341										
115.000					.0283										
116.000											.0168				
135.000	.0018				.0039				.0044				.0028		
149.000															
180.000	.0061				.0042				.0040				.0027		
X/L	.6500	.6750	.8000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0360	1.0500			

PHI



(RTK917)

AEDC VA352 OH4B 01 ORG. FUSELAGE

MACH (1) = 6.000 ALPHA (2) = 35.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1550	.1600	.1620	.1670	.1700	.1750	.1800	.1810	.1820
PHI														
156.000													.0127	.0182
159.200														
170.700														
171.900														
173.400														
180.000														
X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4750
PHI														
.000	.0911	.0916	.0911	.0863	.0000	.0863	.0823	.0750	.0832	.0777	.0769	.0795	.0802	.0776
11.500				.0980				.0835						
17.500								.0917				.0772		
21.500														
23.000														
24.000				.1065				.1009						
31.500				.1191				.0982						
34.000				.1147				.0895						
35.000				.1110				.0080						
40.000				.0393				.0185						
45.000								.0185						
51.000								.0198						
57.500								.0190						
59.500														
61.000								.0132						
65.000								.0010						
70.000														
76.500				.0185										
105.000														
106.000														
135.000														
140.000				.0054										
141.400	.0076													
171.000			.0132											
170.000														
X/L	5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250
PHI														
.000	.0823	.0893	.1004	.1111	.1328	.1589	.1738	.1980	.2101	.2283	.2581	.2395	.2533	.2574
21.500	.0816				.1238				.2221				.2437	
63.000	.0004													
64.000									.0016					
65.000														
65.500					.0008								.0009	



TABULATED DATA LISTING FOR OMB (AEOC VA352)

(RTKB17)

AEDC VA352 CHAB 01 ORG. FUSELAGE

$$\text{WACH} (1) = 0.000 \quad \text{ALPHA} (2) = 33.000$$

SECTION (1) ORBITER FUSELAGE	DEPENDENT VARIABLE HU/HO
1	1.0000
2	1.0000
3	1.0000
4	1.0000
5	1.0000
6	1.0000
7	1.0000
8	1.0000
9	1.0000
10	1.0000
11	1.0000
12	1.0000
13	1.0000
14	1.0000
15	1.0000
16	1.0000
17	1.0000
18	1.0000
19	1.0000
20	1.0000
21	1.0000
22	1.0000
23	1.0000
24	1.0000
25	1.0000
26	1.0000
27	1.0000
28	1.0000
29	1.0000
30	1.0000
31	1.0000
32	1.0000
33	1.0000
34	1.0000
35	1.0000
36	1.0000
37	1.0000
38	1.0000
39	1.0000
40	1.0000
41	1.0000
42	1.0000
43	1.0000
44	1.0000
45	1.0000
46	1.0000
47	1.0000
48	1.0000
49	1.0000
50	1.0000
51	1.0000
52	1.0000
53	1.0000
54	1.0000
55	1.0000
56	1.0000
57	1.0000
58	1.0000
59	1.0000
60	1.0000
61	1.0000
62	1.0000
63	1.0000
64	1.0000
65	1.0000
66	1.0000
67	1.0000
68	1.0000
69	1.0000
70	1.0000
71	1.0000
72	1.0000
73	1.0000
74	1.0000
75	1.0000
76	1.0000
77	1.0000
78	1.0000
79	1.0000
80	1.0000
81	1.0000
82	1.0000
83	1.0000
84	1.0000
85	1.0000
86	1.0000
87	1.0000
88	1.0000
89	1.0000
90	1.0000
91	1.0000
92	1.0000
93	1.0000
94	1.0000
95	1.0000
96	1.0000
97	1.0000
98	1.0000
99	1.0000
100	1.0000

[illegible]

AEDC VA352 CH-48 01 ORB. FUSELAGE

(RTKS18) (25 APR 74)

REFERENCE DATA

REF = .8230 SQ.FT. WREF = .0000 IN.
 REF = 22.5803 IN. WREF = .0000 IN.
 REF = 16.3919 IN. WREF = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -9.000 RN/L = 3.720
 S.FLAP = 10.000 ELEVON = 5.000
 WAW/IT = 1.000

WACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.200 ZI = 3.933 WREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/NO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0800	.0900	.1000
PHI	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10.000														
14.000														
20.000														
22.000														
24.000														
25.000														
30.000														
42.000														
48.000														
60.000														
119.000														
180.000														
X/L	.1200	.1250	.1300	.1400	.1500	.1600	.1670	.1690	.1700	.1760	.1800	.1810	.1820	
PHI	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
10.000														
20.000														
25.000														
40.000														
45.000														
131.000														
145.000														
146.000														
156.000														
159.000														
160.000														
170.000														
171.000														
173.000														
180.000														
X/L	.1630	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4250	.4500	.4750
PHI	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
.0000														
11.000														



(RTN818)

AEDC VA352 OMB 01 ORB, FUSELAGE

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION 1: ORB, FUSELAGE

DEPENDENT VARIABLE MU/NO

Y/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
P=1															
12.000								.0726				.0000			
21.500								.0000							
23.000				.0000											
24.000				.1150											
31.500								.0942							
34.000								.0911							
35.000				.1148				.0741							
40.000				.1161											
45.000								.0156				.0048			
51.000				.0471											
57.500								.0337							
59.500								.0321							
61.000								.0219							
65.000															
70.000				.0221											
76.500															
104.000								.0155				.0124			
106.000								.0016				.0011			
135.000															
140.000				.0000								.0054			
141.400								.0032							
151.000				.0000											
150.000				.0129		.0061									
P=1															
1.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
21.500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
63.000	.0016														
64.000								.0007							
65.000													.0019		
65.500				.0026											
104.000	.0023			.0391		.0531							.0124		.0648
111.000															
112.000				.0272											
113.000				.0274											
116.000															
135.000	.0022			.0032		.0034					.0505				
140.000								.0104							
160.000	.0085			.0041		.0020							.0033		
P=1															
.6500	.6750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500				

(RTK816)

AEDC VA352 Q4B9 01 ORS. FUSELAGE

MACH (1) = 0.000 ALPHA (1) = 30.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L	.6000	.6750	.9000	.9250	.9500	.9750	1.0000	1.0150	1.0300	1.0250	1.0380	1.0500
PHI	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21.500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
39.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
52.500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
55.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
65.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
68.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
100.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
108.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
112.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
113.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

.0082

MACH (1) = 0.000 ALPHA (2) = 35.000 TI = 97.200 QI = 3.933 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L	.0000	.0080	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0800	.0900	.1000
PHI	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
35.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
39.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
42.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
46.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
60.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
119.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
140.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1760	.1800	.1810	.1820
-----	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

PHI	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
40.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
45.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
131.200	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
145.400	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
146.200	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000



(RTK918)

AEDC VA352 OMB 01 OMB, FUSELAGE

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/NO

MACH	8.000	8.250	8.500	8.750	9.000	9.250	9.500	9.750	1.0000	1.0130	1.0250	1.0380	1.0500	1.0620	1.0750	1.0870	1.1000
108.000	.0272				.0366			.0366									.0046
111.000					.0372												
112.000					.0340												
113.000																	
116.000																	
135.000	.0019				.0034			.0044									
149.000								.0043									
160.000	.0027				.0029												.0036

PMI

.0272

DATE 23 SEP 74

TABULATED DATA LISTING FOR OHMB (AEDC VAL 2)

PAGE 116

(RTKB19)

AEDC VA332 OHMB 01 ORB. FUSELAGE

MACH (1) = 0.000 ALPHA (1) = 30.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/40

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000							.0715								
21.500							.0000					.0000			
23.000				.0000											
24.000				.1148											
31.500															
34.000							.0974								
35.000				.1132											
40.000				.1218			.0994								
43.000							.1015								
51.000															
57.500				.0929			.0203								
59.500												.0085			
61.000							.0426								
65.000							.0390								
70.000							.0249								
96.500				.0255											
105.000												.0160			
106.000							.0177								
135.000							.0021					.0012			
140.000				.0000											
141.400															
151.000				.0000											
160.000				.0087		.0032	.0019					.0089			
X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
PHI															
.000															
21.500															
23.000															
63.000				.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
.0024															
64.000															
65.000															
65.500					.0026										
85.500					.0026								.0009		
105.000				.0034											
111.000							.0409						.0100		
112.000				.0316											.0134
113.000				.0285											
116.000															
135.000				.0020					.0040		.0885				
149.000					.0023							.0091			
160.000				.0046		.0035			.0031				.0024		
X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0360	1.0500			
PHI															



AEDC VA352 OM4B 01 ORB. FUELAGE (RTMB19)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1) ORBITER FUELAGE DEPENDENT VARIABLE HU40

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
HU41												
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21.500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
39.000												
52.500						.0060	.1417					.2476
55.000					.0020							
65.000				.0041								
68.000						.0114						
100.000			.0072									
109.000			.0132			.0130	.0066					
112.000								.0031				
113.000												

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.250 QI = 1.983 HREF = .035

SECTION (1) ORBITER FUELAGE DEPENDENT VARIABLE HU40

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
HU41															
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10.000															.1379
14.000									.2352						.1485
20.000									.2227						.1619
24.500									.1056						.0847
35.000									.0776						
42.000									.0293			.0596			
50.000									.0110		.0066				.0127
110.000		.0141	.0250	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
140.000															
HU42															
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10.000															
20.000					.1291	.1173									
24.500					.1371	.1032									
40.000					.0723										
101.000									.0000						
145.000									.0000						
146.250									.0000						.0000

(RTR019)

AEDC VA352 OHB 01 ORB. FUSELAGE

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
P/H														
156.000														
159.200													.0000	.0000
170.700														
171.900														
173.400									.0000		.0000			.0000
180.000		.0061			.0080	.0151				.0703		.0119		
X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3150	.3750	.4000	.4250	.4500	.4750
P/H														
.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11.900				.0368				.0838						
12.000								.0000						
21.500											.0000			
23.000				.0000										
24.000				.1304										
31.500								.1110						
34.000								.1086						
35.000				.1309				.1076						
40.000				.1323										
45.000														
51.000				.0831				.0198						
57.500										.0042				
59.500														
61.000								.0342						
65.000								.0363						
70.000								.0303						
74.500				.0294										
109.000														
136.000								.0184			.0163			
139.000								.0018			.0012			
140.000				.0000										
141.400	.0000													
151.000		.0000												
180.000	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.8000	.8250	.8290
P/H														
.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21.500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
63.000	.0013							.0000	.0000	.0000	.0000	.0000	.0000	.0000
94.000									.0010					
95.000													.0018	
95.500					.0019									



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA352)

PAGE 119

AEDC VA352 OMB 01 ORB. FUSELAGE

(RTN819)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/MD

X/L .5000 .5250 .5500 .5750 .6000 .6250 .6500 .6750 .7000 .7250 .7500 .7750 .8000 .8250 .8500

PHI

105.000 .0310

111.000 .0377

112.000 .0584

113.000 .0469

116.000 .0311

135.000 .0031

149.000 .0021

160.000 .0018

X/L

.8500 .8750 .9000 .9250 .9500 .9750 1.0000 1.0130 1.0140 1.0250 1.0360 1.0500

PHI

.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

21.500 .0000

33.000 .0000

52.500 .0026

55.000 .0033

65.000 .0076

68.000 .0081

100.000 .0083

108.000 .0082

112.000 .0029

113.000 .0034

.0086

.0366

.0046

.0058

.0025

.2417

DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-6B (AEDC VA352)

PAGE 120

AEDC VA352 OH-6B 01 ORG. FUSELAGE

(RTM320) (25 APR 74)

REFERENCE DATA

XREF = .6238 30.FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. YMRP = .0000 IN.
 BREF = 16.3319 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RM/L = 2.000
 S.FLAP = 10.000 ELEVON = 5.000
 HAWAHT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 99.900 Q1 = 1.980 HREF = .035

SECTION (1) ORG. FUSELAGE DEPENDENT VARIABLE MU/NO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI	.0000	.4954	.4225	.2702		.2270	.1937	.1874	.1403	.0000			.1173	.1094	.1022
10.000															.1152
14.000								.1984							.1186
20.000								.1902							.1287
22.000								.0853							.0635
24.500								.0633							
25.000								.0273							.0124
29.000								.0147							.0086
42.500															
48.000															
50.000															
119.000															
180.000															
X/L	.1200	.1250	.1300	.1400	.1500	.1600	.1620	.1670	.1690	.1700	.1760	.1800	.1810	.1820	
PHI	.5572	.0915	.0837	.0767	.1110	.0919	.1059	.0761	.0465						
10.000															
10.000															
20.000															
25.000															
40.000															
45.000															
131.200								.0044							
145.400								.0053							
145.200															
156.000															
159.200															
170.700															
171.900															
173.400															
180.000															
X/L	.1630	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.4000	.4250	.4500	.4750	
PHI	.0065		.0274	.0120											
10.000															
11.900															
PHI	.0711	.0898	.0898	.0898	.0898	.0898	.0898	.0898	.0898	.0898	.0898	.0898	.0898	.0898	.0898
11.900															



DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-8 (AEDC VA352)

PAGE 121

(RTK20)

AEDC VA352 OH-8 01 ORB, FUSELAGE

WACH (1) = 8.000 ALPHA (1) = 30.000

SECTION 1: ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0879							
21.500								.0763				.0624			
23.000															
24.000				.0901											
31.500				.1032											
34.000								.0844							
35.000				.1000				.0778							
40.000				.0969				.0782							
45.000															
51.000				.0345				.0086							
57.500															
59.500								.0184				.0023			
65.000								.0198				.0095			
70.000								.0177				.0005			
96.500				.0178											
105.000								.0131							
106.000								.0013							
135.000															
140.000				.0042											
141.400	.0047		.0144												
151.000															
180.000															
X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
PHI								.0024							
.000	.0524	.0527	.0527	.0499	.0523	.0524	.0527	.0519	.0477	.0501	.0516	.0499	.0554	.0568	
21.500	.0545				.0437				.0516				.0504		
63.000	.0006								.0004						
64.000															
65.000					.0008								.0004		
65.500					.0171										
105.000	.0269							.0037					.0018		.0021
111.000															
112.000					.0327										
113.000					.0369										
116.000															
135.000	.0015				.0024			.0039			.0083				
149.000								.0043							
180.000	.0063				.0058			.0044					.0018		
X/L	.9500	.9750	.9900	.9250	.9500	.9750	1.0000	1.0150	1.0140	1.0250	1.0360	1.0500			

PHI

AEDC VA352 OH-6B 01 ORB, FUSELAGE (RTK820)

WACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0360	1.0500
PHI												
.000	.0892	.0808	.0895	.0804	.0865	.2928	.1489	.2420	.2990	.3135	.3126	
21.500			.0823									
39.000												
52.500						.0035	.1606				.2928	
55.000			.0006									
65.000			.0012									
98.000					.0012							
100.000			.0021									
109.000			.0017			.0017						
112.000							.0014					
113.000							.0016					

WACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.900 QI = 1.980 WREF = .035

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0080	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0800	.0900	.1000
PHI														
.000	.0000	.4995	.4337	.2997		.2468	.2147	.1879	.1565	.0000		.1353	.1304	.1165
10.000														.1337
14.000								.2203						
20.000								.2067						.1369
22.000									.0834					.1423
24.500														.0827
39.000								.0812						
42.500						.0221					.0415			
48.000														.0067
60.000			.0870	.0258		.0108			.0068				.0069	
119.000														
160.000														

WACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.900 QI = 1.980 WREF = .035

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1670	.1700	.1780	.1800	.1810	.1820
PHI													
.000	.1170	.1103	.1021	.0947	.0973				.0934		.0932		
10.000				.1163									
20.000				.1089									
25.500				.1207									
40.000				.0825									
45.500				.0494									
131.200							.0042						
145.400						.0092							
146.200												.0067	



DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-8 (AEDC VA352)

PAGE 123

AEDC VA352 OH-8 01 ORB, FUSELAGE

(RTK820)

WACH (1) = 0.000 ALPHA (2) = 35.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .1200 .1250 .1300 .1350 .1400 .1450 .1500 .1550 .1600 .1620 .1670 .1700 .1750 .1780 .1800 .1810 .1820

P-HI

156.000

159.200

170.700

171.900

173.400

180.000

.0118

.0184

.0451

.0214

.0556

.0536

.0091

.0132

X/L

.1630 .1900 .1910 .2000 .2000 .2250 .2500 .2750 .3000 .3250 .3500 .3750 .4000 .4250 .4500 .4750

P-HI

.0000

11.500

12.000

21.500

23.000

24.000

31.500

34.000

35.000

40.000

45.000

51.000

57.500

59.500

61.000

65.000

70.000

76.500

105.000

106.000

135.000

140.000

141.400

151.000

180.000

180.000

.0066

.0106

.0045

.0141

.0027

.0015

.0127

.0012

.0154

.0008

.0017

.0742

.0780

.0754

.0728

.0694

.0643

X/L

.3000 .5250 .5500 .5750 .6000 .6250 .6500 .6750 .7000 .7250 .7500 .7750 .8000 .8250 .8290

P-HI

.0000

21.500

63.000

64.000

65.000

65.500

.0024

.0645

.0653

.0632

.0535

.0671

.0670

.0647

.0669

.0704

.0698

.0798

.0729

.0830

.0729

.0004

.0002

(RTH820)

AEDC VAS32 OM-8 O1 ORB. FUSELAGE

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION 111 ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
μ_{H1}															
105.000	.0278				.0095			.0040					.0008		
111.000						.0169									.0006
112.000					.0197										
113.000											.0032				
116.000									.0041						
125.000	.0013				.0022						.0060				
149.000									.0014						.0026
190.000	.0013				.0012										
X/L	.6500	.6750	.7000	.7250	.7500	.7750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500			
μ_{H1}															
105.000	.0827	.0870	.0859	.0896	.0844	.02964	.1865	.3094		.3433	.3446	.3276			
21.500			.0885				.2094					.2964			
33.000							.0048								
44.000			.0006												
65.000			.0006												
79.000						.0015									
100.000			.0007												
156.000			.0006			.0012	.0017								
112.000															
113.000									.0032						



AEDC VAS32 QMB Q1 QMB FUSELAGE

(RTKB21) (25 APR 74)

REFERENCE DATA

STEP = .0239 IN. XMRP = .0000 IN.
 STEP = .0239 IN. XMRP = .0000 IN.
 STEP = .0239 IN. XMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -0.000 RN/L = .500
 B.FLAP = 10.000 ELEVON = 9.000
 HAWKNT = 1.000

QMB (1) = 8.000 ALPHA (1) = 30.000 Y1 = 91.980 Q1 = .518 HREF = .017

SECTION (1) QMB FUSELAGE

DEPENDENT VARIABLE MUAD

X/L .0000 .0050 .0100 .0200 .0250 .0300 .0400 .0500 .0600 .0700 .0750 .0780 .0800 .0900 .1000

P=1

.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000
 10.000 14.000 20.000 22.000 24.000 25.000 29.000 42.500 48.000 40.000 119.000 140.000
 .0103 .0178 .0366 .0609 .0807 .0999 .1620 .1670 .1690 .1700 .1780 .1810 .1820 .1820 .1820
 .0181 .0070 .0181 .0070 .0181 .0070 .0181 .0070 .0181 .0070 .0181 .0070 .0181 .0070 .0181

P=1

.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000
 10.000 20.000 25.000 40.000 45.000 131.000 145.000 145.000 145.000 145.000 145.000 145.000 145.000 145.000 145.000
 .0046 .0028 .0037 .0037 .0037 .0037 .0037 .0037 .0037 .0037 .0037 .0037 .0037 .0037 .0037
 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

P=1

.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000
 10.000 11.000 11.000 11.000 11.000 11.000 11.000 11.000 11.000 11.000 11.000 11.000 11.000 11.000 11.000



(RTMB21)

AEDC VA352 OH4B 01 ORB. FUSELAGE

MACH (1) = 6.000 ALPHA (1) = 30.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1630	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0727							
21.500								.0000				.0000			
23.000				.0000											
24.000				.1171											
31.500								.1012							
34.000								.0985							
35.000				.1182				.1030							
40.000				.1237											
45.000								.0544							
51.000								.0173				.0081			
59.500								.0364							
61.000								.0370				.0164			
64.000								.0367				.0017			
70.000															
96.500				.0257								.0035			
105.000								.0177							
106.000								.0029							
135.000															
140.000				.0000											
141.400															
151.000				.0000											
160.000				.0052		.0046		.0015		.7000	.7250	.7500	.8000	.8250	.8590
X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8590
PHI															
.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21.500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
63.000	.0016														
64.000									.0016						
65.000													.0008		
65.500					.0022				.0144				.0059		.0082
109.000	.0334				.0486										
111.000					.0366										
112.000					.0519										
113.000															
116.000					.0035				.0064		.0171				
135.000	.0029				.0034				.0036		.0039				
149.000															
160.000	.0041				.0034								.0025		
X/L	.6500	.6750	.6900	.6950	.7000	.7150	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500			

PHI



(R7XB21)

AEDC VASS2 C-44B 01 ORG. FUSELAGE

WACH (1) = 0.000 ALPHA (2) = 35.000

DEPENDENT VARIABLE HUND

SECTION (1) COVER FUSELAGE

[illegible]

AEDC VA332 CHAB Q1 ORB. FUSELAGE

(RIKB22) (25 APR 74)

REFERENCE DATA

SEP = .8238 SQ.FT. XMRP = .0000 IN.
 REF = 22.5903 IN. XMRP = .0000 IN.
 REF = 16.3919 IN. XMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RV/L = .500
 B.FLAP = 10.000 ELEVON = 5.000
 HAW/HT = 1.000

WACH (1) = 8.000 ALPHA (1) = 30.000 TI = 93.400 Q1 = .523 HREF = .018

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0800	.0900	.1000
PHI	.0000	.0000	.0116	.4295	.2820	.2342	.1934	.1737	.1415	.0000		.1213	.1160	.1069
10.000							.2016						.1194	
14.000							.1896						.1229	
20.000							.0873						.1307	
22.000							.0643						.0663	
24.000							.0288				.0458			
35.000						.0379	.0167			.0093			.0130	.0077
39.000														
42.000														
45.000														
60.000														
119.000														
180.000														
X/L	.1200	.1250	.1300	.1350	.1400	.1500	.1600	.1650	.1670	.1690	.1700	.1760	.1810	.1820
PHI	.0999	.0942	.0876	.0801	.0813						.0778		.0790	
10.000				.0971										
20.000				.0878										
25.000				.1058										
40.000				.0747										
45.000				.0509					.0048					
131.000									.0000				.0086	
145.000													.0086	
146.200														.0130
156.000														
159.200														
170.700										.0127				
171.300														
173.400														
180.000														
X/L	.1850	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4750
PHI	.0061		.0179		.0063	.0125					.0914		.0304	
10.000													.4500	.4750
11.200														
PHI	.0721		.0645	.0642	.0591	.0683	.0632	.0622	.0539	.0561	.0541			
10.000				.0720	.0000									
11.200				.0766										



(RTW022)

AEDC VAS32 QMB 01 002, FUELSAGE

WASH 111 3 8,000 ALPHA 111 = 30,000

SECTION 1: OPERATED FUELSAGE DEPENDENT VARIABLE MU/MO

W/L	1.810	1.900	1.910	2.000	2.220	2.500	2.750	3.000	3.250	3.500	3.750	4.000	4.250	4.500	4.750
9-1															
12,000								.0679					.0640		
21,000								.0747							
23,000				.0608											
24,000				.0597											
31,000								.0698							
34,000				.1072				.0870							
35,000				.0947				.0831							
45,000								.0090							
51,000				.0342				.0196				.0022			
59,000								.0163							
61,000								.0179							
75,000															
76,000				.0130								.0109			
124,000								.0132							
136,000								.0222				.0017			
141,000				.0041								.0032			
145,000															
145,400															
151,000															
156,000															
9-2															
100															
21,000				.0437	.0228	.0224	.0494	.0482	.0448	.0447	.0440	.0411	.0394	.0353	
23,000				.0495	.0490				.0488				.0371		
23,000				.0002											
34,000									.0007				.0061		
35,000					.0012										
35,000					.0115				.0048				.0013		
178,000				.0251											.0019
181,000															
182,000					.0134										
183,000					.0123										
184,000					.0037				.0027						
185,000				.0028											
185,000					.0043				.0042				.0049		
185,000				.0036											
9-3															
100															
21,000				.0437	.0228	.0224	.0494	.0482	.0448	.0447	.0440	.0411	.0394	.0353	
23,000				.0495	.0490				.0488				.0371		
23,000				.0002											
34,000									.0007				.0061		
35,000					.0012										
35,000					.0115				.0048				.0013		
178,000				.0251											.0019
181,000															
182,000					.0134										
183,000					.0123										
184,000					.0037				.0027						
185,000				.0028											
185,000					.0043				.0042				.0049		
185,000				.0036											

9-1



AEDC VAS32 CHAB 01 ORG. FUSELAGE (RTN822)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION 1 (1) ORG. FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.9500	.9750	.9900	.9950	.9975	.9985	.9990	1.0000	1.0100	1.0140	1.0250	1.0380	1.0500
H/HO													
.000	.0331	.0328	.0275	.0155	.0075	.0068	.0102	.0263	.0589	.0924	.1224		
21.500			.0317				.0203					.1068	
39.500													
52.500							.0015						
59.000													
65.000							.0026						
69.000													
100.000							.0002						
108.000							.0006						
112.000							.0011						
113.000							.0015						

.0017

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 93.400 QI = .323 HREF = .018

SECTION 1 (1) ORG. FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.9500	.9650	.9700	.9750	.9800	.9850	.9900	.9950	.9975	.9985	.9990	1.0000	1.0100	1.0140	1.0250	1.0380	1.0500
H/HO																	
.000	.0331	.0328	.0275	.0155	.0075	.0068	.0102	.0263	.0589	.0924	.1224						
10.000																	
14.000																	
20.000																	
24.500																	
31.000																	
39.000																	
42.500																	
48.000																	
60.000																	
119.000																	
160.000																	

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1810	.1820
H/HO														
.000	.0468	.0274	.0274	.0128	.0081	.0081	.0081	.0081	.0081	.0081	.0081	.0081	.0081	.0081
10.000														
20.000														
25.500														
40.000														
43.500														
131.200														
145.400														
146.200														

.0034

.0044



DATE 23 SEP 74

TABULATED DATA LISTING FOR OH48 (AEDC VA352)

PAGE 133

AEDC VA352 OH48 01 ORB. FUSELAGE

(RTN822)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1) ORBITAL FUSELAGE DEPENDENT VARIABLE MU/ND

X/L .1200 .1250 .1300 .1400 .1500 .1600 .1700 .1800 .1900 .2000 .2100 .2200 .2300 .2400 .2500 .2600 .2700 .2800 .2900 .3000 .3100 .3200 .3300 .3400 .3500 .3600 .3700 .3800 .3900 .4000 .4100 .4200 .4300 .4400 .4500 .4600 .4700 .4800 .4900 .5000

PHI

156.000

159.200

170.700

171.200

173.400

180.000

X/L

PHI

.000

.000

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AEDC VAS32 OH4B 01 ORB. FUSELAGE

(RTK223) (25 APR 74)

REFERENCE DATA

STEP = .8238 SQ.FT. XMRP = .0000 IN.
 REF = 22.5803 IN. XMRP = .0000 IN.
 STEP = 16.3319 IN. XMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
 B,FUAP = 10.000 ELEVON = 10.000
 HAW/HT = 1.000

WACH (1) = 0.000 ALPHA (1) = 25.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1) OH4B FUSELAGE

DEPENDENT VARIABLE HU/HO

X/L .0000 .0050 .0100 .0200 .0250 .0300 .0400 .0500 .0600 .0700 .0750 .0760 .0800 .0900 .1000

PHI

.0000 .0000 .0109 .4156 .2592 .2103 .1763 .1504 .1214 .0000 .1006 .0950 .0896 .0977

10.000

14.000

20.000

22.000

24.500

35.000

39.000

42.500

49.000

60.000

119.000

180.000

X/L

.1200 .1250 .1300 .1400 .1500 .1560 .1600 .1620 .1670 .1690 .1700 .1780 .1800 .1810 .1820

PHI

.0821 .0766 .0712 .0664 .0641 .0799 .0937 .0708 .0507 .0616 .0610

10.000

20.000

30.000

40.000

45.500

131.200

145.400

146.200

156.000

159.200

170.700

171.900

173.400

193.000

X/L

.1830 .1900 .1910 .2000 .2250 .2300 .2750 .3000 .3250 .3500 .3750 .4000 .4250 .4500 .4750

PHI

.0991 .0969 .0626 .0601 .0504 .0475 .0530 .0503 .0468 .0462 .0468 .0442

11.500

(RTXB23)

AEDC VAS32 CHAB 01 ORB. FUSELAGE

MACH (1) = 0.000 ALPHA (1) = 25.000

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
P-HI															
12.000								.0535							
21.500								.0608				.0506			
23.000															
24.000				.0756											
31.500				.0865											
34.000								.0732							
36.000				.0846				.0729							
40.000				.0805				.0708							
45.000															
51.000				.0365				.0108				.0032			
53.000								.0206							
61.000								.0209							
65.000								.0156							
70.000															
76.000				.0201											
80.000								.0125				.0107			
83.000								.0033				.0017			
140.000				.0060											
141.000			.0175												
151.000						.0030		.0020				.0044			
160.000															
P-HI															
1.000															
21.500															
33.000															
54.000															
65.000															
65.500															
100.000															
111.000															
112.000															
113.000															
118.000															
135.000															
149.000															
150.000															
X/L	.0500	.0750	.9000	.9250	.9500	.9750	1.0000	1.0150	1.0140	1.0250	1.0380	1.0500			

P-HI



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA352)

PAGE 136

(RTK823)

AEDC VA352 OMB 01 OMB, FUSELAGE

MACH (1) = 0.000 ALPHA (2) = 30.000

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000															
159.200															
170.700															
171.900															
173.400															
180.000															
	.0085				.0085	.0121	.0184			.0140		.0098		.0084	.0127
X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000															
11.500	.0991	.0000	.0843	.0651	.0593	.0378	.0662	.0834	.0609	.0600	.0549	.0512			
12.000															
21.500															
23.000															
24.000															
31.500															
34.000															
35.000															
40.000															
45.000															
51.000															
57.500															
59.500															
61.000															
65.000															
70.000															
96.500															
105.000															
108.000															
135.000															
140.000															
141.400	.0045														
151.000		.0100													
180.000															
X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
PHI															
.000															
21.500	.0533	.0511	.0534	.0545	.0515	.0515	.0515	.0485	.0451	.0448	.0436	.0416	.0395	.0359	
63.000	.0578														
64.000	.0008														
65.000															
65.500															



DATE 23 SEP 74 TABULATED DATA LISTING FOR OMAB (AEDC VA352)

(RTK823)

AEDC VA352 OMAB 01 ORB. FUSELAGE

MACH (1) = 8.000 ALPHA (2) = 30.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/MD

X/L .5000 .5250 .5500 .5750 .6000 .6250 .6500 .6750 .7000 .7250 .7500 .7750 .8000 .8250 .8500

PHI

108.000 .0266 .0106 .0043 .0010 .0014
111.000
112.000 .0138
113.000 .0162
114.000
115.000 .0027 .0028 .0026 .0042
116.000 .0043 .0040 .0042
117.000 .0500 .6750 .9000 .9250 .9500 .9750 1.0000 1.0130 1.0140 1.0250 1.0380 1.0500

X/L

PHI

.0000 .0336 .0310 .0269 .0153 .0083 .0147 .0180 .0267 .0370 .0501 .1199
21.500 .0300
22.500 .0015
23.500
24.500 .0011 .0014 .0019
25.000 .0011 .0007 .0009 .0017
26.000
27.000 .0011 .0010
28.000
29.000
30.000

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/MD

X/L .5000 .5250 .5500 .5750 .6000 .6250 .6500 .6750 .7000 .7250 .7500 .7750 .8000 .8250 .8500

PHI

108.000 .0000 .4422 .2564 .2554 .2230 .1970 .1646 .0000 .1407 .1352 .1248 .1383
111.000
112.000 .2227
113.000 .2083
114.000 .0856
115.000 .0810
116.000 .0244 .0436
117.000 .0129 .0077
118.000 .0290 .0129 .0077
119.000
120.000 .1300 .1250 .1300 .1400 .1500 .1580 .1600 .1670 .1690 .1700 .1780 .1800 .1810 .1820

X/L

(RTW523)

AEDC VA352 Q448 OF ORB. FUSELAGE

MACH (1) = 0.000 ALPHA (3) = 35.000

SECTION 110RBITER FUSELAGE DEPENDENT VARIABLE MU/MD

X/L	.1200	.1250	.1300	.1400	.1500	.1550	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1217	.1180	.1086	.0989	.0977						.0961	.0943			
10.000				.1355											
20.000				.1089											
30.000				.1226											
40.000				.0819											
45.000				.0611											
131.200									.0040						
145.400														.0033	
146.200									.0043					.0071	
156.000															
150.200															
170.700										.0132		.0037			.0119
171.900															
173.400															
175.000															
X/L	.1630	.1500	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000	.0946	.0855	.0842	.0773	.0761	.0726	.0608	.0801	.0756	.0742	.0727	.0697	.0673		
11.500															
12.000															
21.500															
21.700															
21.900															
34.000															
35.000															
40.000															
45.000															
51.000															
57.500															
59.500															
61.000															
65.000															
70.000															
76.500															
104.000															
138.000															
155.000															
140.000															
141.400															
151.000															
160.000															
X/L	.5000	.3250	.3500	.8750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500



(RTR824)

AEDC VA332 OH-8 Q1 ORB. FUSELAGE

MACH (1) = 8.000 ALPHA (2) = 30.000

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE HU/HO

X/L .5000 .5250 .5500 .5750 .6000 .6250 .6500 .6750 .7000 .7250 .7500 .7750 .8000 .8250 .8500

P=1

.0338

.0338

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MACH (1) = 8.000 ALPHA (3) = 35.000

TI = 93.233 Q1 = .523 HREF = .018

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE HU/HO

X/L .5000 .5250 .5500 .5750 .6000 .6250 .6500 .6750 .7000 .7250 .7500 .7750 .8000 .8250 .8500

P=1

.0338

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DATE 23 SEP 74

TABULATED DATA LISTING FOR OH4B (AEDC VA352)

PAGE 147

(RTK824)

AEDC VA352 OH4B 01 ORB. FUSELAGE

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HQ

X/-	.1200	.1250	.1300	.1400	.1500	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI	.0000	.0000	.0000	.0000	.0000	.0000				.0000		.0000		
10.000					.1139									
20.000					.1163									
30.000					.1395									
40.000					.1081									
45.000					.0731									
131.200								.0000						
145.400													.0000	
145.200								.0000						
155.000													.0000	
159.200														.0077
170.700														
171.900														
173.400	.0049				.0043	.0000	.0088		.0727		.0104			
180.000	.1830	.1500	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.4000	.4250	.4500	.4750
PHI	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11.500				.0373				.0962						
12.000								.0000						
21.500														
23.500														
24.500				.1318										
34.000				.1322				.1143						
35.500				.1312				.1120						
40.000								.1126						
45.000				.0546										
51.000								.0145						
57.500														
59.500											.0040			
61.000								.0299						
65.000								.0327						
70.000								.0306						
76.500				.0264										
105.000														
106.000								.0191						
135.000								.0024						
140.000				.0000										
141.400	.0000													
151.000			.0000											
160.000				.0066	.0049	.0023								
X/-	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250

(RTK925)

AEDC VA332 Q44B 01 ORB. FUSELAGE

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION 11 ORBITER FUSELAGE

DEPENDENT VARIABLE MU/HQ

X/L	.1850	.1900	.1950	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
P=1															
12.000								.0876							
21.500								.0760				.0827			
23.000															
24.000				.0906											
31.500				.1037											
34.000								.0853							
37.000				.1002											
40.000				.0963				.0782							
45.000								.0771							
51.000				.0321											
57.500								.0090				.00			
59.500															
61.000								.0178							
63.000								.0191							
70.000								.0172							
95.500				.0177								.0093			
108.000								.0131				.0009			
109.500								.0015							
135.000															
140.000				.0042											
141.400	.0045														
151.000		.0145													
170.000				.0123		.0026						.0084			
X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
P=1															
.0000	.0624	.0620	.0522	.0524	.0625	.0516	.0526	.0518	.0497	.0505	.0529	.0511	.0557	.0582	
21.500	.0347				.0449				.0505				.0521		
63.000	.0006								.0005				.0004		
64.000															
65.000					.0008										
105.000	.0271				.0180				.0034				.0015		.0021
111.000															
112.000					.0325										
113.000					.0362										
114.000															
115.000					.0023						.0083				
137.000	.0014								.0038						
143.000											.0045				
146.000	.0044				.0033				.0043						.0017
X/L	.8750	.9000	.9250	.9500	.9750	1.0000	1.0190	1.0140	1.0140	1.0250	1.0350	1.0500			

P=1

AEDC VAS32 OH4B 01 ORS. FUSELAGE

(RTN828) (25 APR 74)

REFERENCE DATA

STEP = .0238 SQ.FT. XMRP = .0000 IN.
 STEP = 22.9403 IN. XMRP = .0000 IN.
 STEP = 16.3519 IN. XMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 2.000
 9, FLAP = 10.000 ELEVON = 10.000
 MAW/HT = 1.000

WACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.450 QI = 1.983 HREF = .035

SECTION 1 (1) ORS FUSELAGE DEPENDENT VARIABLE HUARD

Y/L	.0000	.0009	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0780	.0800	.0900	.1000
P=1	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10.000															.1217
14.000															
20.000															.1324
22.770															.1490
24.500															.0887
35.000															
39.000															
42.500															
46.000															
48.000															
51.000															.0163
58.000															.0085
100.000															

Y/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
P=1	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10.000															
14.000															
20.000															
22.770															
24.500															
35.000															
39.000															
42.500															
46.000															
48.000															
51.000															
58.000															
100.000															



DATE 23 SEP 74

TABLED DATA LISTING FOR OMB (AEOC VA352)

(R7K920)

AEDC VAS2 C-4B C1 ORB. FUSELAGE

$$\alpha_{\text{Mg}}(1) = 0.000 \quad \alpha_{\text{Mg}}(1) = 30.000$$

44.24	1	1	0.000	1.983	WE ²	=	.039
			1.983	99.450	Q1	=	
			35.000				

DEPENDENT VARIABLE: H1A0

Year	1970	1975	1980	1985	1990
1970	12.0	12.5	13.0	14.0	15.00

(RTKB26)

AEDC VA352 OH-6B 01 ORB. FUSELAGE

MACH (1) = 0.1000 ALPHA (2) = 35.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
PHI															
106.000	.0306				.0634			.0170					.0071		
111.000															.0101
112.000					.0577										
113.000					.0473										
114.000										.0382					
115.000	.0018				.0031			.0046		.0061					
116.000															
117.000	.0020				.0020			.0026					.0025		
X/L	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500	.8750	.9000	.9250	.9500	.9750	1.0000
PHI															
106.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
111.000															
112.000															
113.000															
114.000															
115.000	.0029														
116.000	.0032														
117.000															
106.000	.0049														
108.000	.0037														
112.000															
113.000															



(R1K27)

AEPC VA352 0449 01 ORN. FUSelage

$$\text{MAC}_{\text{HA}}(1) = 6.000 \quad \text{ALPHA}(2) = 30.000$$

3374614 6341800(1) : NC1A03E

DEPENDENT VARIABLE HU/HO

[illegible]

(RTK827)

AEDC V4352 Q448 01 ORB. FUSELAGE

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION 11 ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

Y/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
Part															
10.000	.1173		.1073	.1017	.0946		.0958				.0545				.0929
20.000					.1164										
30.000					.1117										
40.000					.1246										
50.000					.0820										
60.000					.0497				.0090						
70.000															.0085
80.000								.0111							.0129
90.000									.0181			.0062			.0183
100.000		.0150			.0263	.0319	.0620			.0377			.0371		
110.000	.1630	.1900	.1910	.2000	.2240	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
Part															
10.000		.0969		.0874	.0000	.0762	.0608	.0730	.0816	.0768	.0756	.0803	.0803	.0781	.0771
20.000				.0920				.0834							
30.000								.0901				.0773			
40.000				.1076											
50.000				.1192											
60.000				.1190				.1015							
70.000				.1043				.0930							
80.000				.0355				.0906							
90.000								.0042							.0016
100.000								.0145							
110.000								.0184							.0156
120.000								.0188							.0006
130.000															
140.000															
150.000															
Part															
10.000	.0076		.0131	.0124		.0016		.0013							
20.000															
30.000		.0240	.0500	.0750	.0600	.0250	.0500	.0750	.0600	.0250	.0500	.0750	.0600	.0250	.0520
40.000															
50.000															
60.000															
70.000															
80.000															
90.000															
100.000															
110.000															
120.000															
130.000															
140.000															
150.000															



AEDC VA352 OH-6B Q1 ORB. FUSELAGE

(RTN528) (23 APR 74)

REFERENCE DATA

STEP = .0238 IN. XREF = .0000 IN.
 STEP = .025603 IN. XREF = .0000 IN.
 STEP = .063919 IN. XREF = .0000 IN.
 SCALE = .0175 SCALE

WASH (1) = 6.000 ALPHA (1) = 25.000

TI =

97.300 Q1 =

3.930 XREF =

.049

PARAMETRIC DATA

SETA = -9.000 RAYL = 3.720
 S.FLAP = 10.000 ELEVON = 10.000
 HAW/HT = 1.000

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE HU/40

X/Z	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI	.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10.000															.1035
14.000															.1140
20.000															.1340
22.000															.0882
24.000															
30.000															
40.000															
42.000															
44.000															
46.000															
110.000															
180.000															
X/Z	.1200	.1250	.1300	.1400	.1500	.1550	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10.070															.0217
20.000															.0075
24.000															
40.000															
42.000															
131.200															
143.400															
149.200															
156.000															
179.200															
190.000															
191.000															
193.400															
193.800															
X/Z	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
.000															
11.900															



(RTM928)

MACH 1.1 = 0.000 ALPHA (1) = 25.000

AEDC VA332 Q44B 01 ORF. FUELSAGE

SECTION 1: COMPILED FUELSAGE

DEPENDENT VARIABLE: MU/NO

W/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
Q41															
12.000								.0833							
21.500								.0000				.0000			
23.000				.0000				.0000							
24.000				.0581				.0850							
25.000				.1032				.0881							
26.000				.1123				.0310							
27.000				.0827				.0443				.0144			
28.000								.0459							
29.000								.0317				.0612			
30.000								.0215							
Q42															
12.000							.0282					.0164			
21.500								.0171							
23.000								.0029							
24.000				.0000											
25.000				.0000											
26.000				.0000				.0014				.0049			
27.000				.0000				.0750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
28.000				.0000			.0046	.6500							
29.000				.0000			.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
30.000				.0000			.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Q43															
12.000															
21.500															
23.000				.0000											
24.000				.0047				.0051							
25.000				.0085				.0027							
26.000				.0307				.0270							
27.000				.0284											
28.000				.0283											
29.000				.0021				.0023				.0331			
30.000				.0022				.0012				.0041			
Q44															
12.000															
21.500															
23.000															
24.000				.0049				.0012							
25.000				.0022				.0012							
26.000				.0021				.0023				.0331			
27.000				.0022				.0012				.0041			
28.000				.0022				.0012				.0039			
29.000				.0022				.0012				.0039			
30.000				.0022				.0012				.0039			

Q41

H

(RTN928)

AEDC VAS32 QMB 01 ORB. FUSELAGE

WAVE NO. 1000 ALPHA (2) 30.0000

SECTION 1 ORBITAL FUSELAGE DEPENDENT VARIABLE HU/HO

WAVE NO.	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020
1000																					
1001																					
1002																					
1003																					
1004																					
1005																					
1006																					
1007																					
1008																					
1009																					
1010																					
1011																					
1012																					
1013																					
1014																					
1015																					
1016																					
1017																					
1018																					
1019																					
1020																					

.0000 .0000

.0000 .0000

.0140 .4250 .4500 .4750

.0000 .0000

.0000 .0000

.0738 .0000

.0000 .0000

.0073 .0983 .0000

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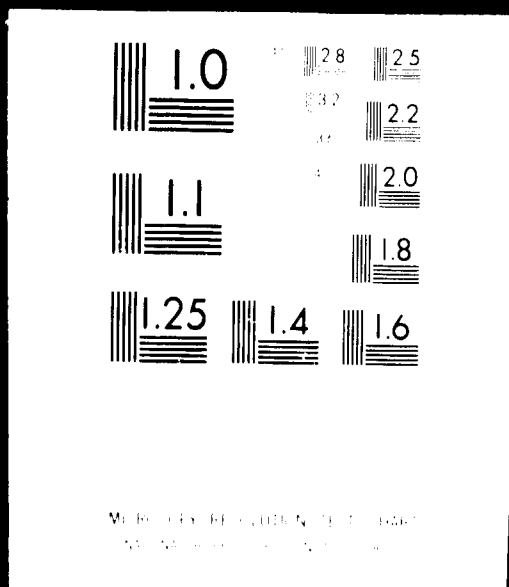
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4 of 7

N75 18290 UNCLAS



DATE 23 SEP 74

TABULATED DATA LISTING FOR OM4B (AEDC VA352)

PAGE 172

(RTK528)

AEDC VA352 OM4B 01 ORB. FUSELAGE

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HJ/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
PHI															
.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21.500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
63.000	.0015														
84.000									.0019						
65.000					.0027								.0017		
106.000	.0269				.0554				.0522				.0136		
111.000															.0240
112.000					.0367										
113.000					.0339										
116.000									.0048		.0800				
135.000	.0019				.0035				.0048		.0055				
149.000									.0042				.0038		
180.000	.0028				.0030										
X/L	.6500	.6750	.7000	.7250	.7500	.7750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500			
PHI															
.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000			
21.500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000			
39.000															
52.500							.2949						.3709		
55.000	.0064						.0080								
65.000	.0082														
68.000					.0069										
100.000	.0081														
106.000	.0094				.0079										
112.000						.0086									
113.000								.0087							

(RTKB29)

AEDC VAS92 OMB 02 ORB. FUSELAGE

MACH (1) = 0.000 ALPHA (1) = 29.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L	.1930	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
MU															
12.000								.0000							
21.500								.0624				.0514			
23.000															
24.000				.0732											
31.500				.0845											
34.000								.0000							
35.000				.0819											
40.000				.0933				.0648							
45.000								.0659							
51.000				.0000				.0000							
57.500								.0000				.0000			
59.500								.0000							
61.000								.0000							
65.000								.0000							
70.000								.0000							
76.500				.0000											
106.000								.0000				.0000			
108.000								.0000				.0000			
135.000								.0000				.0000			
140.000				.0000											
141.400															
151.000				.0000											
180.000				.0000			.0000	.0000				.0000			
X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
MU															
.0000															
.0416		.0411	.0409	.0425	.0423	.0427	.0445	.0434	.0436	.0477	.0532	.0542	.0685	.0780	
.0469					.0382			.0474					.0816		
.0000								.0000							
64.000								.0000					.0000		
65.000					.0000								.0000		
65.500					.0000								.0000		
106.000					.0000								.0000		
111.000					.0000								.0000		
112.000					.0000								.0000		
113.000					.0000								.0000		
116.000					.0000						.0000				
135.000				.0000	.0000			.0000							
149.000				.0000	.0000			.0000							
180.000				.0000	.0000			.0000					.0000		
X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0300	1.0500			
MU															



AEDC VA352 Q4B Q2 ORB. FUSELAGE (RTM829)

MACH (1) = 8.000 ALPHA (1) = 25.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

Y/L	.6500	.6750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0360	1.0500
PHI												
.0000	.0628	.0909	.0934	.0960	.0989	.0913	.0934	.0000		.0000	.0000	.0889
21.000			.0949									
39.000						.0000	.0000					.0000
57.000			.0000									
75.000			.0000									
93.000			.0000			.0000						
111.000			.0000			.0000						
129.000			.0000			.0000						
147.000							.0000					
165.000								.0000				

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.087 QI = 3.940 REF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

Y/L	.0000	.0260	.0130	.0250	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.0000	.4865	.4948	.4146	.2799		.2253	.1553	.1890	.1408	.1263		.1161	.1103	.1014	.1014
10.000								.0000						.0000	.0000
14.000								.0000						.0000	.0000
20.000								.0000						.0000	.0000
22.000								.0000						.0000	.0000
24.000								.0000						.0000	.0000
30.000								.0000						.0000	.0000
39.000								.0000						.0000	.0000
42.000								.0000						.0000	.0000
48.000								.0000						.0000	.0000
50.000								.0000						.0000	.0000
119.000			.0000		.0000	.0000	.0000	.0000		.0000					
150.000			.0000		.0000	.0000	.0000	.0000		.0000					

MACH (1) = 8.000 ALPHA (2) = 30.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

Y/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1760	.1800	.1810	.1820
PHI															
.0000	.0966		.0903	.0845	.0769	.0766				.0739		.0745			
10.000					.0000	.0000									
20.000					.0000	.0000									
25.000					.0000	.0000									
40.000					.0000	.0000									
45.000					.0000	.0000									
131.000							.0000								
145.000								.0000							
146.000									.0000						.0000

AEDC VA352 OH-6B OR ORB. FUSELAGE (RTS29)

MACH (1) = 8.000 ALPHA (2) = 30.000

SECTION 1 (1) ORB. FUSELAGE

DEPENDENT VARIABLE HU/HO

Y/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0000	.0000
159.200															
170.700															
171.900															
173.400															
180.500															
Y/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000	.0735		.0676	.0500	.0296	.0235	.0183	.0069	.0040	.0000					
11.500			.0000												
12.000															
21.500															
23.000															
24.000															
31.500															
34.000															
35.000															
40.000															
45.000															
51.000															
57.500															
59.500															
61.000															
65.000															
70.000															
96.500															
105.000															
106.000															
135.000															
140.000															
141.400															
151.000															
160.000															
Y/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
PHI															
.000	.0556	.0607	.0608	.0709	.0776	.0900	.0986	.1079	.1242	.1400	.1509	.1795	.1922		
21.500															
63.000															
64.000															
65.000															
65.500															



AEDC VA352 Q448 Q2 ORB. FUSELAGE

(RTN829)

MACH (1) = 8.000 ALPHA (2) = 30.000

SECTION (1) ORB. FUSELAGE

DEPENDENT VARIABLE MU/HQ

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
P-H															
108.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
115.000					.0000										
135.000	.0000				.0000				.0000						.0000
145.000					.0000				.0000						
150.000	.0000				.0000				.0000						.0000

X/L .8500 .8750 .9000 .9250 .9500 .9750 1.0000 1.0130 1.0140 1.0250 1.0380 1.0500

P-H

.000	.1908	.1823	.1750	.1637	.1598	.1424	.1387	.0000		.0000	.0000	.1265			
21.500			.1747												
35.000						.0000						.0000			
52.500						.0000									.0000
55.000				.0000											
65.000				.0000											
84.000						.0000									
100.000				.0000											
108.000			.0000												
112.000			.0000			.0000									
113.000						.0000									
115.000						.0000									

MACH (1) = 8.000 ALPHA (3) = 35.000 T1 = 97.087 Q1 = 3.940 HREF = .049

SECTION (1) ORB. FUSELAGE

DEPENDENT VARIABLE MU/HQ

X/L	.0000	.0250	.0500	.0750	.1000	.1250	.1500	.1750	.2000	.2250	.2500	.2750	.3000	.3250	.3500
P-H															
.000	.4272	.4503	.4141	.2344	.2487	.2176	.1891	.1603	.1461						
10.000							.0000								
14.000							.0000								
20.000							.0000								
22.000							.0000								
24.000							.0000								
35.000							.0000								
39.000							.0000								
42.000							.0000								
48.000							.0000								
50.000							.0000								
119.000			.0000			.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
140.000						.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
150.000	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1760	.1800	.1810	.1820

STABULATED DATA LISTING FOR Q448 (AEDC VA352)

(RTK829)

AEDC VA352 OMIB 02 ORB. FUSELAGE

CASE 23 SEP 74

$$\text{MACH (1)} = 0.000 \quad \text{ALPHA (3)} = 35.000$$

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE HUSD

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
PMI															
.0000	.0765	.0835	.0945	.1040	.1301	.1530	.1708	.1910	.2014	.2188	.2312	.2262	.2498	.2342	
21.500	.0808				.1123				.2087				.2412		
63.000	.0000								.0000				.0000		
64.000															
65.000															
65.500					.0000								.0000		
105.000	.0000				.0000				.0000				.0000		
111.000					.0000										
112.000					.0000						.0000				
113.000					.0000										
116.000					.0000				.0000		.0000				
125.000	.0000				.0000				.0000		.0000				
149.000					.0000				.0000				.0000		
190.000	.0000				.0000				.0000						
X/L	.6950	.6750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0360	1.0500			
PMI															
.0000	.2346	.2146	.2008	.1960	.1669	.1678	.1840	.0000		.0695	.0000	.1503			
21.500			.2026				.0000						.0000		
39.000						.0000									
52.500			.0000												
55.000			.0000												
65.000			.0000			.0000									
66.000			.0000			.0000									
100.000			.0000												
104.000			.0000			.0000									
112.000						.0000									
113.000							.0000		.0000						

AEDC VA392 Q4B Q2 ORB. FUELSAGE

(RTM550) (25 APR 74)

REFERENCE DATA

REF = .0236 SQ.FT. WHP = .0000 IN.
 REF = 22.5803 IN. WHP = .0000 IN.
 REF = 16.3316 IN. WHP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 R/L = 2.000
 B.FLAP = .000 ELEVON = .000
 MAW/HT = 1.000

WASH (1) = 6.000 ALPHA (1) = 25.000 TI = 94.933 QI = 1.986 HREF = .031

SECTION (1) ORB. FUELSAGE

DEPENDENT VARIABLE H/W/O

R/L .0000 .0000 .0100 .0200 .0250 .0300 .0400 .0500 .0600 .0700 .0750 .0760 .0800 .0900 .1000

P=1

.000 .4591 .4598 .3965 .2491 .1998 .1705 .1442 .1200 .1064 .0973 .0949 .0882
 10.000
 14.000
 20.000
 22.000
 24.500
 25.000
 29.000
 42.500
 45.000
 63.000
 119.000
 180.000

R/L

.1200 .1250 .1300 .1400 .1500 .1560 .1600 .1620 .1670 .1690 .1700 .1760 .1800 .1810 .1820

P=1

.0788 .0729 .0668 .0616 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000
 10.000
 20.000
 25.500
 40.000
 45.500
 131.200
 149.400
 148.200
 158.200
 159.200
 170.700
 171.900
 173.400
 180.000

R/L

.1850 .1900 .1910 .2000 .2250 .2500 .2750 .3000 .3250 .3500 .3750 .4000 .4250 .4500 .4750

P=1

.0582 .0527 .0000 .0471 .0456 .0500 .0529 .0468 .0444 .0430 .0407
 .000
 11.900



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMIB (MEDC VA392)

PAGE 181

(RTB30)

MEDC VA392 OMIB 02 ORB. FUSELAGE

MACH (1) = 0.000 ALPHA (1) = 25.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/MO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0000							
21.500								.0813				.0494			
23.000															
24.000				.0743				.0000							
31.500				.0871											
34.000								.0000							
35.000				.0852				.0886							
40.000				.0820				.0864							
45.000								.0000							
51.000				.0000				.0000							
57.500								.0000							
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000				.0000							
105.000								.0000							
106.000								.0000							
135.000								.0000							
140.000				.0000				.0000							
141.400								.0000							
151.000				.0000				.0000							
160.000				.0000				.0000							
X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
PHI															
.000	.0385	.0409	.0387	.0376	.0387	.0367	.0382	.0369	.0345	.0344	.0326	.0308	.0302	.0272	
21.500	.0452				.0366			.0378					.0282		
63.000	.0000							.0000					.0000		
64.000								.0000					.0000		
65.000					.0000			.0000					.0000		
65.500					.0000			.0000					.0000		
105.000	.0000				.0000			.0000					.0000		
111.000					.0000			.0000					.0000		
112.000					.0000			.0000					.0000		
113.000					.0000			.0000					.0000		
116.000					.0000			.0000					.0000		
135.000	.0000				.0000			.0000					.0000		
149.000					.0000			.0000					.0000		
160.000	.0000				.0000			.0000					.0000		
X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500			

PHI



DATE 23 SEP 74 TABULATED DATA LISTING FOR OM4B (AEDC VAS32)

(RTW330)

AEDC VAS32 OM4B 02 ORB. FUSELAGE

MACH (1) = 0.000 ALPHA (1) = 29.000

SECTION (1) ORB. FUSELAGE DEPENDENT VARIABLE MU/MO

X/L .6500 .6750 .9000 .9250 .9500 .9750 1.0000 1.0150 1.0140 1.0250 1.0300 1.0500

P=1	.000	.0250	.0260	.0230	.0226	.0213	.0216	.0207	.0000	.0213	.0000	.0205
21.500		.0263										.0000
39.000				.0000			.0000					
52.500				.0000								
55.000				.0000								
95.000				.0000								
98.000				.0000								
100.000				.0000								
124.000				.0000								
132.000					.0000							
133.000						.0000						

MACH (1) = 0.000 ALPHA (2) = 30.000 T1 = 94.933 Q1 = 1.986 WEF = .035

SECTION (1) ORB. FUSELAGE DEPENDENT VARIABLE MU/MO

X/L .0000 .0050 .0100 .0250 .0300 .0350 .0400 .0500 .0600 .0700 .0750 .0800 .0900 .1000

P=1	.000	.4811	.4925	.4233	.2763	.2262	.1940	.1653	.1395	.1261	.1181	.1114	.1025
10.000								.0000					.0000
14.000								.0000					.0000
20.000								.0000					.0000
22.000								.0000					.0000
24.500								.0000					.0000
35.000								.0000					.0000
39.000								.0000					.0000
42.500								.0000					.0000
48.000								.0000					.0000
60.000								.0000					.0000
119.000								.0000					.0000
140.300								.0000					.0000

X/L .1200 .1250 .1300 .1400 .1500 .1560 .1600 .1620 .1670 .1690 .1700 .1760 .1810 .1820

P=1	.000	.0962	.0903	.0808	.0769	.0766				.0746		.0747	
10.000					.0000								
20.000					.0000								
29.500					.0000								
40.000					.0000								
49.500					.0000								
131.200													
145.400													
149.200													



(RTN830)

MACH (1) = 8.000 ALPHA (2) = 30.000

AEDC VA332 OMB OF OMB, FUSELAGE

SECTION (1) OMB, FUSELAGE

DEPENDENT VARIABLE MU/40

X/L	.9000	.9250	.9500	.9750	6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
PMI															
108.000	.0000				.0000				.0000				.0000		
111.000															
112.000					.0000										
113.000					.0000										
116.000															
119.000	.0000				.0000				.0000						
145.000															
146.000	.0000				.0000				.0000						

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0300	1.0400
PMI												
109.000	.0592	.0876	.0946	.0869	.0839	.0875	.0808	.0000		.0822	.0000	.0842
21.000		.0247										
39.000						.0000						.0000
52.000			.0000									
75.000			.0000									
85.000			.0000									
88.000			.0000									
100.000			.0000									
106.000			.0000			.0000						
112.000							.0000					
119.000								.0000				

MACH (1) = 8.000 ALPHA (3) = 35.000

(RTN830)

TI = 94.933 QI = 1.986 MEF = .035

SECTION (1) OMB, FUSELAGE

DEPENDENT VARIABLE MU/40

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0800	.0900	.1000
PMI														
10.000	.4220	.4868	.4276	.2982		.2449	.2135	.1865	.1584	.1442		.1344	.1274	.1192
14.000							.0000							.0000
20.000							.0070							.0000
22.000							.0000							.0000
24.000							.0000							.0000
35.000							.0000							.0000
39.000							.0070							.0000
42.000							.0000							.0000
46.000							.0070							.0000
50.000							.0000							.0000
119.000								.0000						.0000
140.000									.0000					.0000



DATE 23 SEP 74

TABULATED DATA LISTING FOR OM4B (AEDC VA352)

PAGE 165

AEDC VA352 OM4B O2 ORB. FUSELAGE (RTK83D)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1176		.1078	.1025	.0912		.0940				.0924		.0930		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000						.0000	
156.000															.0000
159.200															
170.700										.0000					
171.500															
173.400															
180.000		.0000			.0000		.0000								
X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000	.0923		.0855	.0855	.0855	.0764	.0764	.0709	.0818	.0877	.0771	.0718	.0711	.0681	.0644
11.500			.0000	.0000											
12.000								.0000							
21.500												.0730			
23.000								.0872							
24.000				.1035											
31.500			.1157												
34.000				.1112											
35.000			.1051					.0929							
40.000				.1051				.0908							
45.000				.0000											
51.000								.0000							
57.500															
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
109.000												.0000			
108.000															
135.000								.0000							
140.000				.0000											
141.400															
151.000		.0000		.0000		.0000		.0000							
180.000												.0000			
X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500

(RTMB30)

AEDC VA352 QMB 02 CRB. FUSELAGE

MACH (1) = 0.500 ALPHA (3) = 35.000

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/MO

X/	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
PHI															
.000	.0630	.0625	.0629	.0603	.0643	.0646	.0659	.0667	.0653	.0709	.0730	.0723	.0853	.0902	
21.500	.0666				.0556				.0680				.0786		
43.000	.0556														
64.000									.0000						
85.000					.0000								.0000		
106.000	.0500				.0000				.0000				.0000		
127.000					.0000										
148.000					.0000					.0000					
169.000	.0000				.0000				.0000						.0000
X/	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500			
PHI															
.000	.0648	.0659	.0638	.0678	.0607	.0676	.1023	.0000		.0981	.0000	.1028			
21.500			.0972				.0000								
43.000						.0000									
64.000			.0000												
85.000			.0000												
106.000			.0000												
127.000			.0000												
148.000			.0000												
169.000			.0000				.0000								



AEDC VA352 OMAB 02 ORB. FUSELAGE

(RTK931) (25 APR 74)

REFERENCE DATA

SEF =	.6236 SQ.F.T.	XWP =	.0000 IN.
REF =	22.5803 IN.	YWP =	.0000 IN.
SEF =	16.3919 IN.	ZWP =	.0000 IN.
SCALE =	.0175 SCALE		

WACH (1) =	8.000	ALPHA (1) =	25.000	YI	=	92.933	QI	=
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SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE HUND

PM1	.0000	.0080	.0100	.0200	.0250	.0300	.0400	.0500	.0750	.0750	.0800	.0900	.1000
10.000	.4978	.4940	.4033	.2570	.2071	.1739	.1473	.1230	.1073			.0929	.0866
14.000							.0000						.0000
20.000							.0000						.0000
24.500							.0000						.0000
35.000							.0000						.0000
39.000							.0000						.0000
42.500							.0000			.0000			
49.000							.0000						
60.000							.0000						
119.000				.0000			.0000						.0000
160.000			.0000				.0000			.0000			.0000

1200	1250	1300	1400	1500	1560	1600	1620	1670	1690	1700	1780	1800	1810	1820
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1000

552, 61

AEDC VA332 OH4B 02 ORB. FUSELAGE
(RTK831)

MACH (1) = 8.000 ALPHA (1) = 25.000

SECTION 11 ORBITER FUSELAGE

DEPENDENT VARIABLE HU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
pH1															
12.000								.0000							
21.500								.0619				.0512			
23.000				.0741											
24.000				.0646											
31.500								.0000							
34.000				.0850				.0694							
35.000				.0837				.0700							
40.000								.0000							
45.000								.0000							
51.000								.0000							
57.500								.0000							
59.500								.0000							
61.000								.0000							
65.000								.0000							
70.000								.0000							
76.500								.0000							
105.000								.0000							
106.000								.0000							
135.000								.0000							
140.000								.0000							
141.400	.0000		.0000					.0000							
151.000								.0000							
180.000								.0000							
X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
pH1															
.000	.0419	.0666	.0406	.0415	.0409	.0408	.0406	.0378	.0354	.0350	.0338	.0334	.0303	.0273	
21.500	.0470				.0394				.0390				.0294		
63.000	.0000								.0000				.0000		
64.000									.0000				.0000		
65.000									.0000				.0000		
73.500									.0000				.0000		
105.000	.0000								.0000				.0000		
111.000									.0000				.0000		
112.000									.0000				.0000		
113.000									.0000				.0000		
115.000									.0000				.0000		
135.000	.0000								.0000				.0000		
149.000									.0000				.0000		
180.000	.0000								.0000				.0000		
X/L	.8900	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500			
pH1															



AEDC VA352 OH-6B Q2 ORS. FUSELAGE (RTK231)

WACH (1) = 8.000 ALPHA (1) = 25.000

SECTION (1) OH-6B FUSELAGE

DEPENDENT VARIABLE HU/HO

WACH	8.000	8.750	9.500	9.250	9.500	9.750	1.0000	1.0130	1.0140	1.0230	1.0380	1.0500
P-41												
1.000	.0260	.0248	.0213	.0200	.0168	.0169	.0144	.0000		.0143	.0000	.0121
21.000			.0233									
35.000							.0000					.0000
52.000												
53.000			.0000									
65.000			.0000									
66.000			.0000									
100.000			.0000									
105.000			.0000									
112.000							.0000					
113.000								.0000				

WACH (1) = 8.000 ALPHA (2) = 30.000 TI = 92.933 Q1 = .523 HEF = .018

SECTION (1) OH-6B FUSELAGE

DEPENDENT VARIABLE HU/HO

WACH	8.000	8.750	9.500	9.250	9.500	9.750	1.0000	1.0130	1.0140	1.0230	1.0380	1.0500
P-41												
1.000	.0000	.0000	.0100	.0200	.0250	.0300	.0400	.0500	.0500	.0750	.0760	.0900
10.000		.4686	.5033	.4374	.2904	.2318	.2061	.1681	.1442	.1289	.1210	.1131
14.000								.0000				.1117
20.000								.0000				.0000
22.000								.0000				.0000
24.000								.0000				.0000
35.000								.0000				.0000
53.000								.0000				.0000
62.000								.0000				.0000
115.000			.0000					.0000				.0000
125.000		.1200	.1250	.1300	.1400	.1500	.1600	.1620	.1670	.1690	.1780	.1820

WACH (1) = 8.000 ALPHA (2) = 30.000 TI = 92.933 Q1 = .523 HEF = .018

SECTION (1) OH-6B FUSELAGE

DEPENDENT VARIABLE HU/HO

WACH	8.000	8.750	9.500	9.250	9.500	9.750	1.0000	1.0130	1.0140	1.0230	1.0380	1.0500
P-41												
1.000	.0000	.0000	.0100	.0200	.0250	.0300	.0400	.0500	.0500	.0750	.0760	.0900
10.000		.1029	.0950	.0690	.0822	.0819				.0798	.0787	.0787
14.000					.0000							.0000
20.000					.0000							.0000
22.000					.0000							.0000
24.000					.0000							.0000
35.000					.0000							.0000
53.000					.0000							.0000
62.000					.0000							.0000
115.000			.0000					.0000				.0000
125.000		.1200	.1250	.1300	.1400	.1500	.1600	.1620	.1670	.1690	.1780	.1820

WACH (1) = 8.000 ALPHA (2) = 30.000 TI = 92.933 Q1 = .523 HEF = .018

SECTION (1) OH-6B FUSELAGE

DEPENDENT VARIABLE HU/HO

WACH	8.000	8.750	9.500	9.250	9.500	9.750	1.0000	1.0130	1.0140	1.0230	1.0380	1.0500
P-41												
1.000	.0000	.0000	.0100	.0200	.0250	.0300	.0400	.0500	.0500	.0750	.0760	.0900
10.000		.1029	.0950	.0690	.0822	.0819				.0798	.0787	.0787
14.000					.0000							.0000
20.000					.0000							.0000
22.000					.0000							.0000
24.000					.0000							.0000
35.000					.0000							.0000
53.000					.0000							.0000
62.000					.0000							.0000
115.000			.0000					.0000				.0000
125.000		.1200	.1250	.1300	.1400	.1500	.1600	.1620	.1670	.1690	.1780	.1820

DATE 23 SEP 74

TABULATED DATA LISTING FOR OH4B (AEDC VA352)

PAGE

AEDC VA352 OH4B 02 ORB. FUSELAGE (RTN311)

MACH (1) = 8.000 ALPHA (2) = 30.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

	.1200	.1250	.1300	.1400	.1500	.1600	.1670	.1700	.1750	.1800	.1850
PHI											
175.000											
179.200											
170.700											
171.000											
173.400											
180.000											

PHI

175.000

179.200

170.700

171.000

173.400

180.000

X/L

PHI

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OF POOR QUALITY

DATE 23 SEP 74

TABULATED DATA LISTING FOR OHMB (AEDC VA352)

PAGE 191

AEDC VA352 OHMB 02 ORB. FUSELAGE

(RTN831)

WACH (1) = 8.000 ALPHA (2) = 30.000

SECTION 1: ORBITER FUSELAGE DEPENDENT VARIABLE MU/HQ

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
P-H															
105.000	.0000				.0000				.0000				.0000		.0000
111.000					.0000				.0000				.0000		.0000
112.000					.0000				.0000				.0000		.0000
113.000					.0000				.0000				.0000		.0000
116.000					.0000				.0000				.0000		.0000
121.000					.0000				.0000				.0000		.0000
149.000					.0000				.0000				.0000		.0000
150.000					.0000				.0000				.0000		.0000

X/L .8500 .8750 .9000 .9250 .9500 .9750 1.0000 1.0130 1.0140 1.0250 1.0380 1.0500

P-H

100.000	.0341	.0306	.0290	.0272	.0223	.0226	.0200	.0000	.0191	.0000	.0176				
21.000			.0122												
29.000						.0000					.0000				
32.000			.0000			.0000									
42.000			.0000			.0000									
64.000			.0000			.0000									
64.000			.0000			.0000									
100.000			.0000			.0000									
110.000			.0000			.0000									
113.000			.0000			.0000									

WACH (1) = 8.000 ALPHA (3) = 30.000 TI = 92.33 GI = .523 HREF = .018

SECTION 2: ORBITER FUSELAGE DEPENDENT VARIABLE MU/HQ

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500	.0800	.0780	.0500	.1000
P-H																
100.000	.4344	.5063	.4454	.3036	.2542	.2247	.1922	.1644	.1491				.1397	.1311	.1274	.1274
10.000							.0000								.0000	.0000
14.000							.0000								.0000	.0000
20.000							.0000								.0000	.0000
22.000							.0000								.0000	.0000
24.000							.0000								.0000	.0000
27.000							.0000								.0000	.0000
32.000							.0000								.0000	.0000
42.000							.0000								.0000	.0000
48.000							.0000								.0000	.0000
60.000							.0000								.0000	.0000
110.000			.0000		.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
140.000		.1200	.1250	.1300	.1400	.1500	.1580	.1600	.1620	.1670	.1780	.1800	.1810	.1820	.1820	.1820

(RTM852)

AEDC VA352 OMB 02 OMB, FUSELAGE

WASH (1) 1 0.000 ALPHA (1) = 30.000

SECTION 11 OMB, FUSELAGE

DEPENDENT VARIABLE MUAD

W/L	.1850	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0000							
21.500								.0722				.0598			
23.000															
24.000				.0879											
31.500				.1007											
34.500								.0000							
35.000				.0974				.0822							
40.000				.0938				.0805							
45.000								.0000							
57.500												.0000			
73.000								.0000							
81.000								.0000							
85.000								.0000							
90.000								.0000							
96.000				.0000								.0000			
104.000								.0000							
106.000								.0000							
135.000								.0000							
140.000				.0000											
141.400															
151.000				.0000											
160.000								.0000							
W/L															
.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500	.8750
PHI															
.0000	.0813	.0816	.0808	.0833	.0830	.0701	.0493	.0466	.0430	.0422	.0390	.0372	.0331		
.0564				.0456								.0337			
.0000															
.64.000								.0000				.0000			
.65.000								.0000				.0000			
.65.500								.0000				.0000			
108.000								.0000				.0000			
111.000								.0000				.0000			
112.000								.0000				.0000			
113.000								.0000				.0000			
116.000								.0000				.0000			
135.000	.0000							.0000				.0000			
149.000								.0000				.0000			
160.000								.0000				.0000			
.6900	.6750	.6000	.5250	.4500	.3750	.3000	.2250	.1500	.0750	.0000	1.0150	1.0140	1.0250	1.0360	1.0500

PHI

DATE 23 SEP 74

TABULATED DATA LISTING FOR OM4B (AEDC VA352)

PAGE 137

AEDC VA352 OM4B OR ORB. FUELSAGE (RTR932)

MACH (1) = 0.000 ALPHA (2) = 35.000

SECTION (1) ORB. FUELSAGE DEPENDENT VARIABLE MUAD

R/L .1200 .1250 .1300 .1400 .1500 .1560 .1600 .1620 .1670 .1700 .1760 .1800 .1817 .1820

PHI

196.000

199.200

190.700

191.900

193.400

190.000

R/L

.1830 .1900 .1910 .2000 .2250 .2500 .2750 .3000 .3250 .3500 .4000 .4250 .4500 .4750

PHI

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RTK332)

MACH (1) = 8.000 ALPHA (2) = 35.000

AEDC VAS32 OMB 02 OMB. FUSELAGE

SECTION 110201 PER FUSELAGE DEPENDENT VARIABLE MU/NO

Y/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
P=1															
10.000	.0000				.0000				.0000				.0000		.0000
11.000															
12.000					.0000										
13.000					.0000										
14.000					.0000										
15.000					.0000				.0000						
16.000					.0000				.0000						
17.000					.0000				.0000						
18.000					.0000				.0000						
19.000					.0000				.0000						

Y/L .5000 .5250 .5500 .5750 .6000 .6250 .6500 .6750 .7000 .7250 .7500 .7750 .8000 .8250 .8500

P=1

20.000	.0401	.0397	.0350	.0342	.0292	.0277	.0255	.0000		.0249	.0700	.0234			
21.000															
22.000															
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30.000															
31.000															
32.000															
33.000															

MACH (1) = 8.000 ALPHA (3) = 45.000

RTK332)

AEDC VAS32 OMB 01 OMB. FUSELAGE

SECTION 110201 PER FUSELAGE DEPENDENT VARIABLE MU/NO

Y/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
P=1															
10.000	.0000				.0000				.0000				.0000		.0000
11.000															
12.000					.0000				.0000				.0000		.0000
13.000					.0000				.0000				.0000		.0000
14.000					.0000				.0000				.0000		.0000
15.000					.0000				.0000				.0000		.0000
16.000					.0000				.0000				.0000		.0000
17.000					.0000				.0000				.0000		.0000
18.000					.0000				.0000				.0000		.0000
19.000					.0000				.0000				.0000		.0000
20.000					.0000				.0000				.0000		.0000
21.000					.0000				.0000				.0000		.0000
22.000					.0000				.0000				.0000		.0000
23.000					.0000				.0000				.0000		.0000
24.000					.0000				.0000				.0000		.0000
25.000					.0000				.0000				.0000		.0000
26.000					.0000				.0000				.0000		.0000
27.000					.0000				.0000				.0000		.0000
28.000					.0000				.0000				.0000		.0000
29.000					.0000				.0000				.0000		.0000
30.000					.0000				.0000				.0000		.0000
31.000					.0000				.0000				.0000		.0000
32.000					.0000				.0000				.0000		.0000
33.000					.0000				.0000				.0000		.0000



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA352)

PAGE 199

AEDC VA352 OMB 28 ORB. FUSELAGE

(RTK332)

MACH (1) = 8.000 ALPHA (3) = 45.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .1200 .1250 .1300 .1350 .1400 .1500 .1550 .1600 .1650 .1700 .1750 .1800 .1810 .1820

PHI

.0000 .1444 .1385 .1321 .1220 .1200 .1200 .1200 .1200 .1200 .1200 .1200 .1200 .1200

10.000
20.000
25.500
40.000
45.500
131.200
145.400
146.200
156.000
159.200
170.700
171.900
173.400
180.000

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DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA352)

PAGE 200

(RTAB32)

MACH (1) = 0.000 ALPHA (3) = 45.000

AEDC VA352 OMB 02 ORB. FUSELAGE

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE HU-140

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
PHI															
.000	.0827	.0757	.0612	.0813	.0796	.0772	.0741	.0738	.0694	.0701	.0662	.0609	.0566	.0526	
21.000	.0899				.0721				.0739				.0551		
63.000	.0700														
84.000									.0000						
65.000													.0000		
65.500					.0000									.0000	
106.000	.0000				.0000				.0000				.0000		
111.000					.0000								.0000		
112.000					.0000										.0000
113.000					.0000										
116.000									.0000		.0000				
135.000	.0000				.0000				.0000		.0000				
149.000					.0000				.0000				.0000		
180.000	.0000				.0000										
X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500			
PHI															
.000	.0425	.0523	.0502	.0507	.0448	.0430	.0421	.0000		.0424	.0000	.0420			
21.000			.0531										.0000		
39.000						.0000	.0000								
92.000			.0000												
95.000			.0000												
65.000			.0000												
69.000			.0000			.0000									
100.000			.0000												
109.000			.0000												
112.000						.0000	.0000		.0000						
113.000															



AEDC VA352 CHAB 02 ORB. FUSELAGE

(RTK933) (23 APR 74)

REFERENCE DATA

```

SEFF = .8239 53.FT.  XMRP = .0000 IN.
LEFF = 22.9827 IN.    XMRP = .0000 IN.
ZSEFF = 16.3319 IN.   ZMRP = .0000 IN.
SCALE = .5173 SCALE

```

PARAMETRIC DATA

DETA	=	.000	RM/L	=	1.250
S.FLAP	=	.000	ELEVON	=	.000
WAW/HY	=	1.000			

MACH (1) =	5.000	ALPHA (1) =	30.000	YI	=	94.250	QI	=	1.253	H*EF	=	.027
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SECTION 1 LOGGING FUELAGE

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
10,000	.4511	.4991	.4264	.2718	.2278	.1998	.1690	.1368	.1272				.1168	.1093	.1029
14,000							.0000								.0000
20,000							.0000								.0000
22,500							.0000								.0000
24,500							.0000								.0000
35,000							.0000								.0000
39,000							.0000								.0000
42,500							.0000					.0000			
48,000							.0000								
60,000							.0000								.0000
119,000							.0000					.0000			.0000
190,000							.0000								.0000
X/L	.1200	.1250	.1300	.1400	.1500	.1550	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
10,000	.0971		.0891	.0844	.0775	.0784					.0763		.0733		
10,000					.0000										
20,000					.0000										
25,500					.0000										
40,000					.0000										
45,500					.0000										
131,200							.0000								
145,400							.0000							.0000	
146,200															
158,000														.0000	
159,200															
170,700										.0000		.0000			.0000
171,900															
173,400															
180,000		.0000			.0000		.0000								
X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
10,000															
11,500	.0733			.0890	.0607	.0614	.0808	.0576	.0637	.0713	.0698	.0573	.0582	.0544	.0926

(RTK533)

AEDC VA352 OMB Q2 ORB. FUSELAGE

MACH (1) = 0.000 ALPHA (1) = 30.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/DO

X/L	.1630	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
P-H:															
12.000								.0000							
21.500								.0731				.0617			
23.000															
24.000				.0866											
31.500				.1000											
34.000								.0000							
35.000				.0975											
40.000				.0934				.0630							
43.000								.0906							
51.000				.0000											
57.500								.0000							
59.500								.0000							
61.000								.0000							
65.000								.0000							
70.000								.0000							
74.500				.0000											
105.000								.0000							
106.000				.0000				.0000							
135.000								.0000							
140.000				.0000				.0000							
141.400															
151.000				.0000											
180.000								.0000							
X/L															
.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500	.8750
P-H:															
.0448	.0408	.0368	.0493	.0508	.0491	.0483	.0461	.0436	.0436	.0429	.0402	.0379	.0340		
.0553				.0440											
.0220															
64.000								.0000							
65.000				.0000				.0000							
65.500				.0000				.0000							
105.000				.0000				.0000							
111.000				.0000				.0000							
112.000				.0000				.0000							
113.000				.0000				.0000							
116.000				.0000				.0000							
135.000				.0000				.0000							
149.000				.0000				.0000							
180.000				.0000				.0000							
.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500				
P-H:															



AEDC VA352 OH4B 02 ORB. FUSELAGE (RTTB33)

MACH (1) = 0.000 ALPHA (1) = 30.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU40

X/L .9500 .8750 .8000 .9250 .9500 .9750 1.0000 1.0130 1.0140 1.0250 1.0380 1.0500

PHI

.000	.0326	.0315	.0292	.0282	.0235	.0231	.0212	.0000	.0202	.0000	.0194
21.500			.0308								
39.000							.0000				.0000
52.500											
55.000			.0000								
65.000			.0000								
66.000											
100.000			.0000								
108.000			.0000								
112.000						.0000					
115.000							.0000				

.0000

MACH (1) = 0.000 ALPHA (2) = 35.000 TI = 94.250 QI = 1.253 HREF = .027

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU40

X/L .0000 .0050 .0100 .0200 .0250 .0300 .0400 .0500 .0600 .0700 .0750 .0800 .0900 .1000

PHI

.000	.4243	.4565	.4286	.2943	.2454	.2155	.1872	.1597	.1451	.1335	.1260	.1194	.1194
10.000												.0000	.0000
14.000							.0000						
20.000								.0000					
22.000									.0000				.0000
24.500										.0000			.0000
35.000											.0000		.0000
39.000												.0000	.0000
42.500													
46.000											.0000		
60.000												.0000	.0000
115.000													
160.000													

X/L

.1200 .1250 .1300 .1400 .1500 .1580 .1600 .1620 .1670 .1690 .1700 .1760 .1810 .1820

PHI

.000	.1158	.1083	.1010	.0936	.0939	.0929	.0902						
10.000				.0000									
20.000				.0000									
25.500				.0000									
40.000				.0000									
45.500				.0000									
131.200								.0000					
145.400													
146.200													.0000

.0000

(RTK833)

AEDC VA352 OHMB Q2 ORB. FUSELAGE

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION 110 ORBITER FUSELAGE

DEPENDENT VARIABLE MU/NO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1700	.1780	.1800	.1810	.1820
PHI														
156.000													.0000	.0000
159.200														
170.700											.0000			
171.900														
173.400														
190.000														

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.0000	.0931			.0848	.0000	.0743	.0731	.0710	.0804	.0877	.0754	.0708	.0663	.0626	
11.500				.0000											
12.000															
21.500															
23.000															
24.000				.1039											
31.500				.1185								.0724			
34.000															
36.000				.1117											
40.000				.1036											
45.000															
51.000				.0000											
57.500															
59.500															
61.000															
65.000															
70.000															
96.500				.0000											
105.000															
108.000															
135.000															
140.000				.0000											
141.400															
151.000				.0000											
190.000															

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
PHI															
.0000	.0619	.0625	.0611	.0624	.0614	.0608	.0601	.0581	.0530	.0538	.0525	.0492	.0490	.0451	
21.500					.0531				.0562						
63.000															
64.000															
65.000															
81.500					.0000										



DATE 23 SEP 74

TABULATED DATA LISTING FOR OH4B (AEDC VA352)

PAGE 203

(RTKB33)

AEDC VA352 OH4B 02 ORB. FUSELAGE

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
PHI															
105.000	.0000				.0000				.0000				.0000		
111.000					.0000										.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000			.0000							
149.000									.0000		.0000				
160.000	.0000				.0000			.0000					.0000		
X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500			
PHI															
.000	.0433	.0420	.0391	.0378	.0342	.0329	.0317	.0000		.0343	.0000	.0331			
21.500			.0399												
39.000						.0000	.0000					.0000			
52.500															
55.000			.0000												
65.000			.0000												
68.000															
100.000			.0000												
108.000			.0000												
112.000						.0000	.0000								
113.000								.0000							

DATE 23 SEP 74

TABULATED DATA LISTING FOR OM48 (AEDC VA352)

PAGE 207

AEDC VA352 OM48 02 ORB. FUSELAGE

(RTK834)

MACH (1) = 6.000 ALPHA (1) = 30.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L .1830 .1900 .1910 .2000 .2250 .2500 .2750 .3000 .3250 .3500 .3750 .4000 .4250 .4500 .4750

PHI

12.000														
21.500														
23.000														
24.000				.0894										
31.500				.1015										
35.000				.0978										
40.000				.0926										
45.000														
51.000				.0000										
57.500														
59.500														
61.000														
65.000														
70.000														
76.500				.0000										
105.000														
106.000														
125.000														
140.000				.0000										
141.400														
151.000														
160.000														

X/L

PHI

.0000	.0502	.0499	.0499	.0551	.0501	.0492	.0483	.0465	.0440	.0440	.0436	.0408	.0404	.0369
21.500	.0546				.0441									
63.000														
64.000														
65.000														
65.500														
105.000														
111.000														
112.000														
113.000														
116.000														
135.000														
149.000														
160.000														

X/L .6500 .6750 .6800 .9250 .9500 .9750 1.0000 1.0130 1.0140 1.0250 1.0380 1.0500

PHI

AEDC VA352 OMB 02 ORB. FUSELAGE (RTM534)

MACH (1) = 0.000 ALPHA (1) = 30.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0358	.0352	.0330	.0315	.0285	.0250	.0279	.0000	.0281	.0000	.0276	
21.500			.0346									
39.000						.0000						.0000
52.500												
65.000			.0000									
75.000			.0000									
85.000			.0000									
100.000			.0000									
109.000			.0000									
112.000						.0000						
113.000							.0000					

MACH (1) = 0.000 ALPHA (2) = 35.000 TI = 94.900 QI = 1.534 HREF = .030

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L	.0000	.0080	.0100	.0200	.0250	.0300	.0400	.0600	.0700	.0750	.0760	.0800	.1000
PHI													
.000	.4232	.4261	.4300	.2934	.2476	.2141	.1698	.1592	.1449	.1337	.1265	.1211	.1000
10.000							.0000					.0000	
14.000												.0000	
20.000							.0000					.0000	
22.000												.0000	
24.500							.0000					.0000	
35.000							.0000					.0000	
39.000							.0000					.0000	
42.500							.0000					.0000	
46.000							.0000					.0000	
60.000							.0000					.0000	
119.000			.0000		.0000		.0000		.0000			.0000	
160.000												.0000	

X/L .1200 .1250 .1300 .1400 .1500 .1560 .1600 .1620 .1670 .1690 .1700 .1760 .1810 .1820

PHI .000 .1162 .1066 .1016 .0930 .0951 .0931 .0929

10.000					.0000								
20.000					.0000								
25.500					.0000								
40.000					.0000								
45.500					.0000								
131.200						.0000							
145.400							.0000						.0000
146.200								.0000					

(RTK034)

AEDC VA352 OMB O2 ORB. FUSelage

$$\text{MACH} (1) = 0.000 \quad \text{ALPHA} (2) = 35.000$$

DEPENDENT VARIABLE MUANO

SECTION (1) ORBITER PUSHLAGE

[illegible]

DATE 23 SEP 74

TABULATED DATA LISTING FOR OM-18 (AEDC VA392)

PAGE 210

AEDC VA392 OM-18 ORB. FUELAGE (RTRB34)

WACH (1) = 0.000 ALPHA (2) = 39.000

SECTION (1) ORBITER FUELAGE

DEPENDENT VARIABLE MU/MD

X/L	.9000	.9250	.9500	.9750	.9000	.9250	.9500	.9750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
PHI															
108.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000															
139.000	.0000				.0000				.0000		.0000				
149.000									.0000						
180.000	.0000				.0000				.0000						
X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0360	1.0500			
PHI															
.0000	.0532	.0529	.0517	.0521	.0462	.0507	.0495	.0000		.0502	.0000	.0496			
21.500															
39.000															
52.500						.0000	.0000								
55.000															
65.000															
68.000															
100.000						.0000	.0000								
106.000															
112.000						.0000	.0000								
119.000							.0000		.0000						

WETDC VAS32 CH4B OF ORG. FUSILLAGE

(RTK835) (23 APR 74)

REVIEW MEMORANDUM

406	=	.0236	30.871	4069	=	.0000	IN.
470	=	22.903	IN.	4469	=	.0000	IN.
820	=	16.519	IN.	2469	=	.0000	IN.
SCALE =				.0175 SCALE			

BETA = .000 PVAL = 1.750
D.F.LAP = .000 ELEVON = .000
dMY = 1.000

PARAMETRIC DATA

MACH	(1) = 8.000	ALPHA (1) = 30.000	T1 = 26.200	Q1 = 1.797	K27 = .033
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DEPENDENT VARIABLE: MLAG
SECTION (1) ORBITER FUSELAGE[illegible]

DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-8 (AEDC VA352)

PAGE 213

AEDC VA352 OH-8 02 ORB. FUSELAGE (RTK839)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.6500	.6750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0360	1.0500
PHI												
.000	.0440	.0451	.0430	.0439	.0390	.0417	.0425	.0000		.0437	.0000	.0444
21.500		.0441										
39.000												
52.500							.0000					.0000
55.000			.0000									
65.000			.0000									
68.000			.0000									
100.000			.0000									
108.000			.0000									
112.000						.0000						
115.000							.0000					

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.200 QI = 1.797 MEF = .033

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.1000
PHI														
.000	.4233	.4911	.4124	.2967		.2466	.2133	.1878	.1373	.1437		.1334	.1259	.1192
10.000								.0000					.0000	.0000
14.000								.0000					.0000	.0000
20.000								.0000					.0000	.0000
22.000								.0000					.0000	.0000
24.500								.0000					.0000	.0000
35.000								.0000					.0000	.0000
39.000								.0000					.0000	.0000
42.500								.0000					.0000	.0000
46.000								.0000					.0000	.0000
60.000								.0000					.0000	.0000
119.000			.0000		.0000		.0000	.0000			.0000		.0000	.0000
160.000			.0000		.0000		.0000	.0000			.0000		.0000	.0000
X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1760	.1810	.1820
PHI														
.000	.1129	.1063	.1000	.0944		.0943					.0926		.0919	
10.000				.0000		.0000					.0000		.0000	.0000
20.000				.0000		.0000					.0000		.0000	.0000
25.500				.0000		.0000					.0000		.0000	.0000
40.000				.0000		.0000					.0000		.0000	.0000
49.500				.0000		.0000					.0000		.0000	.0000
131.200							.0000				.0000		.0000	.0000
145.400							.0000				.0000		.0000	.0000
146.200							.0000				.0000		.0000	.0000

DATE 23 SEP 74

TABULATED DATA LISTING FOR OH4B (AEDC VA352)

PAGE 215

(RTKB35)

AEDC VA352 OH4B C2 ORB. FUSELAGE

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
PHI															
109.000	.0000				.0000				.0000				.0000		.0000
111.000					.0000										
112.000					.0000										
113.000					.0000						.0000				
115.000					.0000				.0000						
135.000	.0000				.0000				.0000		.0000				
149.000					.0000				.0000				.0000		
180.000	.0000				.0000										
X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500			
PHI															
.000	.0663	.0672	.0663	.0672	.0630	.0664	.0720	.0000		.0724	.0000	.0743			
21.500			.0700				.0000						.0000		
39.000															
52.500						.0000									
55.000			.0000												
65.000			.0000												
68.000						.0000									
100.000			.0000												
108.000			.0000			.0000			.0000						
112.000															
113.000									.0000						

AEDC VA352 OM48 Q2 ORB. FUSELAGE

(RTK836) (23 APR 74)

REFERENCE DATA

SEF = .8238 33.FT. XMRP = .0000 IN.
 LEF = 22.5903 IN. YMRP = .0000 IN.
 SEF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.967 Q1 = 1.984 HREF = .035

PARAMETRIC DATA

BETA = .000 RV/L = 2.000
 B.FLAP = .000 ELEVON = .000
 HAWAHT = 1.000

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/HQ

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI	.0000	.4529	.4920	.1234	.2746	.2237	.1993	.1677	.1410	.1276		.1163	.1069	.0964	.0900
10.000							.0000								.0000
14.000							.0000								.0000
20.000							.0000								.0000
22.000							.0000								.0000
24.500							.0000								.0000
35.000							.0000								.0000
39.000							.0000								.0000
42.500							.0000								.0000
48.000							.0000								.0000
60.000							.0000								.0000
119.000							.0000				.0000				.0000
190.000							.0000				.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1760	.1800	.1810	.1820
PHI	.0928		.0696	.0634	.0764	.0768					.0752		.0747		
10.000					.0000	.0000									.0000
10.000					.0000	.0000									.0000
20.000					.0000	.0000									.0000
25.500					.0000	.0000									.0000
40.000					.0000	.0000									.0000
45.500					.0000	.0000									.0000
131.200						.0000			.0000						.0000
145.400						.0000			.0000						.0000
146.200						.0000			.0000						.0000
156.000						.0000			.0000						.0000
159.200						.0000			.0000						.0000
170.700						.0000			.0000						.0000
171.900						.0000			.0000						.0000
173.400						.0000			.0000						.0000
180.000						.0000			.0000						.0000

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI	.0744	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
.0000															.0000
11.500															.0000

X/L	.0744	.0685	.0616	.0626	.0589	.0639	.0681	.0605	.0595	.0586	.0544	.0507
PHI	.0744	.0685	.0616	.0626	.0589	.0639	.0681	.0605	.0595	.0586	.0544	.0507
.0000												



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA352)

PAGE 217

(RTK936)

AEDC VA352 OMB 02 ORB. FUSELAGE

MACH 1.1 = 8,000 ALPHA (1) = 30.000

SECTION 1 (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/HO

Y/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
0-1															
12,000								.0000							
21,000								.0760				.0825			
23,000				.0895											
24,000				.0993											
31,000								.0000							
34,000				.0965				.0815							
35,000				.0935				.0771							
40,000								.0000							
45,000								.0000							
51,000								.0000							
57,000								.0000							
59,000								.0000							
61,000								.0000							
63,000								.0000							
70,000								.0000							
76,000				.0000											
105,000								.0000							
106,000								.0000							
135,000				.0000				.0000							
140,000				.0000				.0000							
141,400								.0000							
151,000			.0000					.0000							
155,000				.0000				.0000							
X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
0-1															
1,000	.0511	.0504	.0496	.0542	.0504	.0499	.0503	.0495	.0470	.0497	.0468	.0457	.0504	.0502	
21,000	.0554			.0452					.0469						
63,000	.0000								.0000						
64,000									.0000						
65,000				.0000					.0000				.0000		
65,500				.0000					.0000				.0000		
105,000	.0000								.0000				.0000		.0000
111,000				.0000											
112,000				.0000											
113,000				.0000											
115,000				.0000					.0000		.0000				
115,000	.0000			.0000					.0000						
115,000				.0000					.0000		.0000				
149,000				.0000					.0000		.0000				
160,000	.0000			.0000					.0000		.0000		.0000		
X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0360	1.0500			

0-1

AEDC VA352 OH-6B OR ORG. FUSELAGE (RTK838)

MACH (1) = 0.000 ALPHA (1) = 30.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0360	1.0500
PHI												
.000	.0421	.0547	.0544	.0516	.0527	.0563	.0586	.0600	.0600	.0600	.0600	.0610
21.500			.0549				.0000					.0000
39.000						.0000						
52.500							.0000					
55.000												
65.000							.0000					
69.000												
100.000							.0000					
108.000							.0000					
112.000							.0000					
113.000							.0000					

MACH (1) = 0.000 ALPHA (2) = 35.000 TI = 94.987 QI = 1.984 WEF = .033

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0060	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.4203	.4921	.4208	.2982		.2459	.2144	.1854	.1583	.1451		.1350	.1300	.1161	.0000
10.000								.0000						.0000	.0000
14.000								.0000						.0000	.0000
20.000								.0000						.0000	.0000
22.000								.0000						.0000	.0000
24.500								.0000						.0000	.0000
35.000								.0000						.0000	.0000
39.000								.0000						.0000	.0000
42.500								.0000						.0000	.0000
46.000								.0000						.0000	.0000
60.000								.0000						.0000	.0000
119.000								.0000						.0000	.0000
180.000								.0000						.0000	.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1600	.1620	.1670	.1690	.1700	.1760	.1800	.1810	.1820
-----	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

PHI														
.000	.1159	.1097	.0990	.0931	.0650					.0931	.0923			
10.000				.0000	.0000									
20.000				.0000	.0000									
24.500				.0000	.0000									
40.000				.0000	.0000									
45.000				.0000	.0000									
131.000								.0000						
145.400								.0000						
146.000								.0000						.0000

TABULATED DATA LISTING FOR Q4B (AEDC VA392)

(RTK336)

AEDC VA392 Q4B Q2 ORB. FUSELAGE

MACH (1) = 0.000 ALPHA (2) = 35.000

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE HU/HO

X/L .1200 .1250 .1300 .1400 .1500 .1600 .1700 .1800 .1900 .2000 .2100 .2200 .2300 .2400 .2500 .2600 .2700 .2800 .2900 .3000 .3100 .3200 .3300 .3400 .3500 .3600 .3700 .3800 .3900 .4000 .4100 .4200 .4300 .4400 .4500 .4600 .4700 .4800 .4900 .5000

PHI
176.000
179.200
176.700
171.900
173.400
180.000

X/L .1630 .1900 .1910 .2000 .2250 .2500 .2750 .3000 .3250 .3500 .3750 .4000 .4250 .4500 .4750 .5000 .5250 .5500 .5750 .6000 .6250 .6500 .6750 .7000 .7250 .7500 .7750 .8000 .8250 .8500 .8750 .9000 .9250 .9500 .9750 .9900

PHI
176.000
179.200
176.700
171.900
173.400
180.000

X/L .1630 .1900 .1910 .2000 .2250 .2500 .2750 .3000 .3250 .3500 .3750 .4000 .4250 .4500 .4750 .5000 .5250 .5500 .5750 .6000 .6250 .6500 .6750 .7000 .7250 .7500 .7750 .8000 .8250 .8500 .8750 .9000 .9250 .9500 .9750 .9900

PHI
176.000
179.200
176.700
171.900
173.400
180.000

X/L .1630 .1900 .1910 .2000 .2250 .2500 .2750 .3000 .3250 .3500 .3750 .4000 .4250 .4500 .4750 .5000 .5250 .5500 .5750 .6000 .6250 .6500 .6750 .7000 .7250 .7500 .7750 .8000 .8250 .8500 .8750 .9000 .9250 .9500 .9750 .9900

PHI
176.000
179.200
176.700
171.900
173.400
180.000

X/L .1630 .1900 .1910 .2000 .2250 .2500 .2750 .3000 .3250 .3500 .3750 .4000 .4250 .4500 .4750 .5000 .5250 .5500 .5750 .6000 .6250 .6500 .6750 .7000 .7250 .7500 .7750 .8000 .8250 .8500 .8750 .9000 .9250 .9500 .9750 .9900

PHI
176.000
179.200
176.700
171.900
173.400
180.000

X/L .1630 .1900 .1910 .2000 .2250 .2500 .2750 .3000 .3250 .3500 .3750 .4000 .4250 .4500 .4750 .5000 .5250 .5500 .5750 .6000 .6250 .6500 .6750 .7000 .7250 .7500 .7750 .8000 .8250 .8500 .8750 .9000 .9250 .9500 .9750 .9900

PHI
176.000
179.200
176.700
171.900
173.400
180.000

X/L .1630 .1900 .1910 .2000 .2250 .2500 .2750 .3000 .3250 .3500 .3750 .4000 .4250 .4500 .4750 .5000 .5250 .5500 .5750 .6000 .6250 .6500 .6750 .7000 .7250 .7500 .7750 .8000 .8250 .8500 .8750 .9000 .9250 .9500 .9750 .9900

PHI
176.000
179.200
176.700
171.900
173.400
180.000

X/L .1630 .1900 .1910 .2000 .2250 .2500 .2750 .3000 .3250 .3500 .3750 .4000 .4250 .4500 .4750 .5000 .5250 .5500 .5750 .6000 .6250 .6500 .6750 .7000 .7250 .7500 .7750 .8000 .8250 .8500 .8750 .9000 .9250 .9500 .9750 .9900

PHI
176.000
179.200
176.700
171.900
173.400
180.000

X/L .1630 .1900 .1910 .2000 .2250 .2500 .2750 .3000 .3250 .3500 .3750 .4000 .4250 .4500 .4750 .5000 .5250 .5500 .5750 .6000 .6250 .6500 .6750 .7000 .7250 .7500 .7750 .8000 .8250 .8500 .8750 .9000 .9250 .9500 .9750 .9900

PHI
176.000
179.200
176.700
171.900
173.400
180.000

X/L .1630 .1900 .1910 .2000 .2250 .2500 .2750 .3000 .3250 .3500 .3750 .4000 .4250 .4500 .4750 .5000 .5250 .5500 .5750 .6000 .6250 .6500 .6750 .7000 .7250 .7500 .7750 .8000 .8250 .8500 .8750 .9000 .9250 .9500 .9750 .9900

PHI
176.000
179.200
176.700
171.900
173.400
180.000

X/L .1630 .1900 .1910 .2000 .2250 .2500 .2750 .3000 .3250 .3500 .3750 .4000 .4250 .4500 .4750 .5000 .5250 .5500 .5750 .6000 .6250 .6500 .6750 .7000 .7250 .7500 .7750 .8000 .8250 .8500 .8750 .9000 .9250 .9500 .9750 .9900

(RTK836)

MACH (1) = 8.000 ALPHA (2) = 35.000

AEDC VAS32 OMB OR ORG. FUSELAGE

SECTION (1) ORG. FUSELAGE

DEPENDENT VARIABLE MU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
PHI															
108.000	.0000				.0000				.0000				.0000		.0000
111.000					.0000										.0000
112.000					.0000										
113.000					.0000										
116.000					.0000				.0000		.0000				
135.000	.0000				.0000				.0000		.0000				
145.000					.0000				.0000		.0000				
140.000	.300				.0000				.0000		.0000				

X/L	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0360	1.0500
-----	-------	-------	-------	-------	-------	--------	--------	--------	--------	--------	--------

PHI

.000	.0899	.0921	.0922	.0937	.0963	.1002	.0000	.0000	.0369	.0000	.1016
21.500		.0942									
39.000					.0000						.0000
52.500					.0000						
55.000			.0000								
65.000			.0000								
68.000			.0000								
100.000			.0000								
108.000			.0000								
112.000			.0000								
113.000					.0000			.0000			

MACH (1) = 8.000 ALPHA (3) = 45.000 TI = 94.987 QI = 1.984 HREF = .035

SECTION (1) ORG. FUSELAGE

DEPENDENT VARIABLE MU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.3384	.4685	.4413	.3235	.2785	.2520	.2243	.1888	.1748				.1658	.1491	.1334
10.000							.0000								.0000
14.000							.0000								.0000
20.000							.0000								.0000
22.000							.0000								.0000
24.500							.0000								.0000
35.000							.0000								.0000
39.000							.0000								.0000
42.500							.0000								.0000
48.000							.0000								.0000
60.000							.0000								.0000
110.000			.0000		.0000		.0000		.0000		.0000				.0000
140.000					.0000		.0000		.0000		.0000				.0000
X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1670	.1750	.1760	.1800	.1810	.1800	.1810	.182

(RTKB36)

AEDC VA392 OH-1B Q2 ORB, FUSELAGE

MACH (1) = 0.000 ALPHA (3) = 45.000

SECTION (1) ORB/INER FUSELAGE

DEPENDENT VARIABLE MU/HO

X/Z .1200 .1250 .1300 .1350 .1400 .1500 .1560 .1600 .1620 .1670 .1690 .1700 .1750 .1800 .1810 .1820

P-1

.000	.1431	.1371	.1309	.1225	.1235						.1231		.1214		
10.000				.0000											
20.000				.0000											
25.000				.0000											
40.000				.0000											
45.000				.0000											
131.000				.0000					.0000						
145.400								.0000						.0000	
146.200								.0000						.0000	
155.000															.0000
159.200															
170.700												.0000			.0000
171.000										.0000					
173.400															
180.000															

X/Z

.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

P-1

.500															
11.500	.1212		.1036	.0000	.1024	.1007	.0962	.1045	.1127	.0978	.0936	.0929	.0893	.0866	
12.000			.0000												
21.500															
23.000								.1139			.0982				
24.000			.1319												
31.500			.1457												
34.000								.0000							
35.000			.1383												
40.000			.1342					.1144							
45.000							.1096								
51.000			.0000					.0000							
57.500											.0000				
59.800															
61.000															
63.000															
70.000															
76.500			.0000												
78.000											.0000				
100.000															
105.000															
115.000															
140.000			.0000					.0000							
141.400															
151.000		.0000													
170.000															
170.500															
180.000	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500

AEDC VA392 Q-48 Q2 ORG. FUSELAGE

(RTK33) (25 APR 74)

REFERENCE DATA

STEP = .025 SQ.FT. XMP = .0000 IN.
 STEP = 22.500 IN. XMP = .0000 IN.
 STEP = 10.000 IN. XMP = .0000 IN.
 SCALE = .0000 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.250
 3.FLAP = .000 ELEVSN = .000
 HAW/HT = 1.000

MAGN (1) = 9.000 ALPHA (1) = 30.000 Y1 = 95.200 Q1 = 2.341 HREF = .036

SECTION 11 COMBINED FUSELAGE

DEPENDENT VARIABLE MU/MO

R/L .0000 .0050 .0100 .0200 .0300 .0400 .0500 .0600 .0700 .0750 .0760 .0800 .0900 .1000

P=1

.0000 .4580 .4540 .4160 .2739 .2283 .1928 .1632 .1362 .1293 .1191 .1107 .0981 .0900
 10.0000
 14.0000
 20.0000
 22.0000
 24.0000
 25.0000
 26.0000
 27.0000
 28.0000
 29.0000
 30.0000
 31.0000
 32.0000

.0000

R/L .1200 .1250 .1300 .1400 .1500 .1550 .1600 .1620 .1670 .1690 .1700 .1780 .1800 .1820

P=1

.0000 .0980 .0906 .0836 .0756 .0756 .0749 .0733 .0000 .0000 .0000 .0000 .0000 .0000
 10.0000
 12.0000
 14.0000
 16.0000
 18.0000
 20.0000
 22.0000
 24.0000
 26.0000
 28.0000
 30.0000

.0000

R/L .1850 .1900 .1910 .2000 .2250 .2500 .2750 .3000 .3250 .3500 .3750 .4000 .4250 .4500

.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

R/L .1850 .1900 .1910 .2000 .2250 .2500 .2750 .3000 .3250 .3500 .3750 .4000 .4250 .4500

P=1

.0000 .0736 .0666 .0600 .0520 .0416 .0360 .0346 .0270 .0204 .0182 .0169 .0143 .0120

11.900

(RTN337)

MACH (1) = 0.000 ALPHA (1) = 30.000

AEDC VA332 OM48 02 ORG. FUSELAGE

SECTION (1) ORG. FUSELAGE

DEPENDENT VARIABLE MU/MD

M/L	.1650	.1900	.1910	.2000	.2250	.2400	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
P41															
12.000								.0000							
13.970								.0796				.0624			
15.000				.0866											
24.000				.0280				.0000							
31.000				.0948				.0791							
34.000				.0331				.0763							
35.000				.0000				.0000							
40.000								.0000							
45.000								.0000							
51.000								.0000							
57.000								.0000							
59.000								.0000							
63.000								.0000							
70.000								.0000							
78.000				.0000											
115.000								.0000							
108.000								.0000							
135.000								.0000							
140.000				.0000				.0000							
143.000								.0000							
151.000				.0000				.0000							
180.000								.0000							
M/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
P41															
.0000	.0515	.0802	.0513	.0523	.0523	.0523	.0530	.0530	.0519	.0573	.0610	.0612	.0705	.0746	
21.000				.0416					.0543				.0623		
63.000									.0000				.0000		
64.000									.0000				.0000		
65.000									.0000				.0000		
67.000									.0000				.0000		
105.000									.0000				.0000		
111.000									.0000				.0000		
112.000									.0000				.0000		
113.000									.0000				.0000		
114.000									.0000				.0000		
115.000									.0000				.0000		
116.000									.0000				.0000		
117.000									.0000				.0000		
118.000									.0000				.0000		
119.000									.0000				.0000		
120.000									.0000				.0000		
M/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0310	1.0350	1.0400	1.0450	1.0500
P41															
.0000															
21.000															
63.000															
64.000															
65.000															
67.000															
105.000															
111.000															
112.000															
113.000															
114.000															
115.000															
116.000															
117.000															
118.000															
119.000															
120.000															



AEDC VA352 OMB 02 ORB. FUSELAGE

(RTM537)

WAVE (1) = 8.000 ALPHA (1) = 35.000

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MUAND

Y/L	.0500	.0750	.9000	.9250	.9500	.9750	1.0000	1.0150	1.0140	1.0250	1.0380	1.0500
Phi												
.000	.0799	.0630	.0636	.0697	.0763	.0849	.0887	.0000		.0668	.0000	.0697
21.500			.0645									
39.000							.0000					.0000
55.000			.0000									
77.000			.0000									
93.000			.0000				.0000					
100.000			.0000									
107.000			.0000									
112.000			.0000				.0000					
115.000								.0000				

WAVE (1) = 8.000 ALPHA (2) = 35.000 Y1 = 99.200 Q1 = 2.341 HEE = .036

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MUAND

Y/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0780	.0800	.1000
Phi														
.000	.4232	.4518	.4259	.2938		.2442	.2144	.1843	.1587	.1443		.1334	.1269	.1201
10.000								.0000						.0000
14.000								.0000						.0000
20.000								.0000						.0000
25.000								.0000						.0000
31.000								.0000						.0000
39.000								.0000						.0000
42.000								.0000				.0000		
48.000								.0000						.0000
60.000								.0000						.0000
117.000			.0000											
140.000		.1200	.1250	.1350	.1400	.1500	.1600	.1670	.1690	.1750	.1780	.1810	.1820	

Phi

.000	.1143	.1073	.0993	.0933	.0943									
10.000				.0000						.0923				
21.000				.0000										
25.000				.0000										
40.000				.0000										
45.000				.0000										
117.000								.0000						
140.000								.0000						.0000

DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA352)

PAGE 227

(RTK937)

MACH (1) = 8.000 ALPHA (2) = 35.000

AEDC VA352 OMB 02 OR3. FUSELAGE

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE H/MO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
PHI															
106.000	.0000				.0000				.0000				.0000		
111.000															
112.000					.0000										
113.000					.0000										.0000
114.000											.0000				
115.000	.0000				.0000				.0000						
149.000											.0000				
150.000	.0000				.0000				.0000				.0000		
X/L	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500	.8750	.9000	.9250	.9500	.9750	1.0000
PHI															
.000	.1303	.1304	.1296	.1331	.1191	.1275	.1312	.0000	.1260	.0000	.1266				
21.500			.1367				.0000							.0000	
39.000															
52.500			.0000			.0000									
55.000			.0000			.0000									
65.000			.0000			.0000									
68.000			.0000			.0000									
100.000			.0000			.0000									
108.000			.0000			.0000									
112.000					.0000										
113.000							.0000		.0000						

AEDC VAS32 Q-4B Q2 ORS. FUSELAGE

(RTM338) (23 APR 74)

REFERENCE DATA

STEP = .0238 IN. FT. XREF = .0000 IN.
 XREF = 22.5423 IN. XREF = .0000 IN.
 XREF = 18.1319 IN. XREF = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 0.000 ALPHA (1) = 30.000 TI = 96.550 Q1 = 2.536 HREF = .039
 BETA = .000 TM/L = 2.500
 B.FLAP = .000 ELEVON = .000
 HAWK/HT = 1.000

PARAMETRIC DATA

SECTION (1) ORS. FUSELAGE DEPENDENT VARIABLE HU/HQ

X/L .0000 .0250 .0100 .0200 .0250 .0300 .0400 .0500 .0600 .0700 .0750 .0800 .0900 .1000

P=1

.000 .4882 .4973 .4229 .2773 .2259 .1982 .1636 .1407 .1277 .1185 .1118 .0998
 10.000
 14.000
 20.000
 22.000
 24.000
 25.000
 26.000
 27.000
 28.000
 29.000
 30.000
 31.000
 32.000
 33.000
 34.000
 35.000
 36.000
 37.000
 38.000
 39.000
 40.000
 41.000
 42.000
 43.000
 44.000
 45.000
 46.000
 47.000
 48.000
 49.000
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 81.000
 82.000
 83.000
 84.000
 85.000
 86.000
 87.000
 88.000
 89.000
 90.000
 91.000
 92.000
 93.000
 94.000
 95.000
 96.000
 97.000
 98.000
 99.000
 100.000

X/L .1200 .1250 .1300 .1400 .1500 .1560 .1600 .1620 .1670 .1690 .1700 .1740 .1800 .1820

P=1

.0000 .0969 .0916 .0840 .0762 .0000 .0777 .0754 .0792
 10.000
 15.000
 20.000
 25.000
 30.000
 35.000
 40.000
 45.000
 50.000
 55.000
 60.000
 65.000
 70.000
 75.000
 80.000
 85.000
 90.000
 95.000
 100.000

X/L .1 .0 .1900 .1810 .2000 .2250 .2450 .2750 .3000 .3250 .3500 .3750 .4000 .4250 .4500 .4750

P=1

.000 .0744 .0687 .0634 .0528 .0461 .0352 .0243 .0111 .0000
 10.000
 11.000



PAGE 23 SEP 74

(R 75.238)

REC VAB2 CAB 2 CRB. FUGITIVE

$$\text{max} : 1 = 0.555 \quad \text{A} : 1 = 35.000$$

SECTION 1: DISORDER PREVALENCE

Yr.	1990	1995	1910	2000	2250	2500	2750	3000	3250	3500	3750	4000	4250	4500	4750
ent								.0000				.0834			
21.500								.0785							
23.000				.0868											
24.000				.1002				.0000							
31.500															
34.000															
35.000				.0868				.0813							
40.000				.0825				.0765							
45.000															
51.000				.0000				.0000			.0000				
59.500															
59.500								.0000							
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000							.0000				
105.000								.0000							
106.000								.0000							
135.000								.0000							
140.000				.0000											
141.400	.0000		.0000												
141.000			.0000												
152.000				.0000				.0000							
Yr.	1990	1995	1910	2000	2250	2500	2750	3000	3250	3500	3750	4000	4250	4500	4750
ent															
21.500															
23.000															
24.000															
31.500															
34.000															
35.000															
40.000															
45.000															
51.000															
59.500															
59.500															
61.000															
65.000															
70.000															
96.500															
105.000															
106.000															
135.000															
140.000															
141.400	.0000		.0000												
141.000			.0000												
152.000				.0000				.0000							
Yr.	1990	1995	1910	2000	2250	2500	2750								

i
A

AEDC VA352 OH4B 02 ORB. FUSELAGE (RTK838)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0150	1.0140	1.0250	1.0300	1.0500
PHI												
.000	.0944	.0969	.0994	.1017	.0837	.0968	.0989	.0000		.1003	.0000	.1023
21.500			.0962									
39.000						.0000	.0000					.0000
52.500			.0000									
95.000			.0000									
95.000			.0000			.0000						
99.000			.0000									
100.000			.0000			.0000						
109.000			.0000			.0000						
112.000							.0000					
113.000								.0000				

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.990 QI = 2.536 REF = .039

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L	.0000	.0080	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0800	.0900	.1000
PHI														
.000	.4223	.4950	.4419	.2971	.2450	.2167	.1874	.1581	.1444			.1350	.1289	.1196
10.000							.0000							.0000
14.000							.0000							.0000
20.000							.0000							.0000
22.000							.0000							.0000
24.500							.0000							.0000
35.000							.0000							.0000
39.000							.0000							.0000
42.500							.0000				.0000			.0000
48.000							.0000							.0000
60.000							.0000							.0000
119.000			.0000		.0000		.0000							.0000
160.000								.0000						.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
-----	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

PHI														
.000	.1130	.1089	.1000	.0923	.0800	.0935				.0323	.0908			
10.000				.0000	.0000									
20.000				.0000	.0000									
25.000				.0000	.0000									
40.000				.0000	.0000									
45.000				.0000	.0000									
131.200						.0000								
145.400							.0000							.0000
146.200								.0000						



(RTK939)

AEDC VA352 0-43 02 ORG. FUSELAGE

$$\text{MACH} (1) = 0.000 \quad \text{ALPHA} (2) = 35.000$$

SECTION (1) COMPUTER FUSELAGE

[illegible]

AEDC VA332 OMB 02 ORB, FUSELAGE

(RTK339) (25 APR 74)

REFERENCE DATA

STEP = .9238 SQ.FT. XMRP = .0000 IN.
 STEP = 22.9803 IN. XMRP = .0000 IN.
 STEP = 16.3919 IN. XMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 TR/L = 2.750
 S.FLAP = .000 ELEVON = .000
 WINGHT = 1.000

WING (1) = 6.000 ALPHA (1) = 30.000 TI = 98.100 QI = 2.816 MEF = .041

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/Q

X/L .0000 .0060 .0100 .0200 .0250 .0300 .0400 .0500 .0600 .0700 .0750 .0760 .0800 .0900 .1000

PHI

.0000 .4837 .4937 .4328 .2761 .2280 .1885 .1690 .1399 .1287 .1165 .1102 .1029
 10.000 .0000
 14.000 .0000
 20.000 .0000
 22.000 .0000
 24.000 .0000
 30.000 .0000
 35.000 .0000
 42.000 .0000
 48.000 .0000
 60.000 .0000
 119.000 .0000
 140.000 .0000

X/L

.1200 .1250 .1300 .1400 .1500 .1560 .1600 .1620 .1670 .1690 .1700 .1780 .1800 .1810 .1820

PHI

.0364 .0908 .0948 .0765 .0770 .0741 .0752
 10.000 .0000
 20.000 .0000
 25.000 .0000
 40.000 .0000
 45.000 .0000
 131.000 .0000
 145.400 .0000
 146.200 .0000
 159.000 .0000
 170.000 .0000
 171.000 .0000
 173.400 .0000
 180.000 .0000

X/L

.1830 .1900 .1910 .2000 .2250 .2300 .2750 .3000 .3250 .3300 .3750 .4000 .4250 .4500 .4750

PHI

.0000 .0735 .0861 .0828 .0825 .0844 .0890 .0818 .0598 .0579 .0537 .0523
 11.000 .0000

(RTM339)

AEDC VA352 CM48 Q2 ORG. FUELS

WACH (1) = 8.000 ALPHA (1) = 30.000

SECTION 1: ORG. FUELS

DEPENDENT VARIABLE MU/NO

W/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PH-1															
12.000								.0000				.0596			
21.000								.0783							
31.000															
34.000				.0904											
31.000				.0983											
34.000								.0000							
31.000				.0955											
40.000				.0935											
47.000								.0000							
51.000								.0000							
57.000								.0000							
59.000								.0000							
61.000								.0000							
65.000								.0000							
70.000								.0000							
74.000				.0000											
108.000								.0000							
106.000								.0000							
115.000								.0000							
140.000				.0000											
141.400								.0000							
151.000				.0000											
190.000								.0000							
PH-2															
1.000	.0918	.0935	.0921	.0938	.0955	.0967	.0999	.0915	.0927	.0717	.0781	.0808	.1002	.1093	
21.000	.0864				.0996				.0860				.0922		
63.000	.0000														
64.000									.0000				.0070		
65.000					.0000								.0000		
65.000					.0000				.0000						
104.000	.0000														
111.000					.0000										
112.000					.0000										
113.000					.0000										
116.000					.0000				.0000						
141.000	.0000				.0000				.0000						
143.000					.0000				.0000						
146.000	.0000				.0000				.0000						
W/L	.8100	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0300	1.0300	1.0300	1.0300	

PH-2



DATE 23 SEP 74 TABULATED DATA LISTING FOR OM4B (AEDC VA352)

AEDC VA352 OM4B Q2 ORB. FUSELAGE (RTAB39)

WACH (1) = 8,000 ALPHA (1) = 30,000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/40

WACH	8000	8500	9000	9250	9500	9750	1,0000	1,0130	1,0140	1,0250	1,0380	1,0500
PHI												
.000	.1175	.1158	.1107	.1215	.1071	.1134	.1134	.0000		.1130	.0000	.1089
21,500		.1165					.0000					.0000
39,000												
52,500			.0000									
75,000			.0000									
85,000			.0000									
88,000			.0000									
100,000			.0000									
109,000			.0000									
112,000						.0000						
113,000							.0000					

WACH (1) = 8,000 ALPHA (2) = 35,000 TI = 98,100 QI = 2,816 WDEF = .041

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/40

WACH	8000	8500	9000	9250	9500	9750	1,0000	1,0130	1,0140	1,0250	1,0380	1,0500
PHI												
.000	.4250	.4356	.4352	.2943	.2482	.2150	.1879	.1574	.1446	.1337	.1282	.1185
10,000								.0000				.0000
14,000								.0000				.0000
20,000								.0000				.0000
32,000								.0000				.0000
34,000								.0000				.0000
39,000								.0000				.0000
40,000								.0000				.0000
43,000								.0000				.0000
45,000								.0000				.0000
49,000								.0000				.0000
119,000						.0000				.0000		.0000
140,000							.0000					.0000
142,000	.1250	.1250	.1300	.1400	.1500	.1580	.1600	.1670	.1690	.1700	.1780	.1820

WACH (1) = 8,000 ALPHA (2) = 35,000 TI = 98,100 QI = 2,816 WDEF = .041

WACH	8000	8500	9000	9250	9500	9750	1,0000	1,0130	1,0140	1,0250	1,0380	1,0500
PHI												
.000	.1161	.1089	.0998	.0921	.0941	.0928	.0914					
10,000												
15,000												
20,000												
24,000												
40,000												
43,000												
131,000								.0000				.0000
143,000								.0000				.0000
146,000								.0000				.0000

(RTK839)

AEDC VA332 QMB 02 QMB, FUSELAGE

WIND (1) 0.000 ALPHA (2) = 35.000

DEPENDENT VARIABLE MAND

WIND (1) 0.000 ALPHA (2) = 35.000

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WIND (1) 0.000 ALPHA (2) = 35.000

TABULATED DATA LISTING FOR Q448 (AEDC VAS32)

(RTN839)

AEDC VAS32 Q448 Q2 ORB, FUELSAGE

WACH (1) = 0.000 ALPHA (2) = 35.000

SECTION (1) ORBITER FUELSAGE

DEPENDENT VARIABLE MU/MD

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
P=1															
109.000	.0000				.0000				.0000				.0000		.0000
111.000					.0000										
112.000					.0000										
113.000					.0000						.0000				
115.000					.0000				.0000						
116.000	.0000				.0000				.0000						
119.000					.0000				.0000						
140.000	.0000				.0000				.0000						
X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500			

P=1

109.000	.1682	.1753	.1703	.1669	.1482	.1513	.1510	.0000		.1420	.0000	.1383			
111.000			.1756				.0000					.0000			
112.000							.0000								
113.000							.0000								
115.000							.0000								
116.000							.0000								
119.000							.0000								
140.000							.0000								

AEDC VA352 C-4B 02 ORB. FUSELAGE

(RTB40) (23 APR 74)

REFERENCE DATA

PARAMETRIC DATA

SETP = .9238 33.71. HWP = .0000 IN.
 SETP = 22.8503 IN. HWP = .0000 IN.
 SETP = 16.9919 IN. HWP = .0000 IN.
 SCALE = 1000 SCALE

SETP = .0000 HWP = 3.000
 SETP = .0000 ELEV = .000
 HWP = 1.000

WACH (1) = 6.000 ALPHA (1) = 30.000 TI = 98.900 Q1 = 3.118 HREF = .044

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HUMAN

WACH (1) = 6.000 ALPHA (1) = 30.000 TI = 98.900 Q1 = 3.118 HREF = .044

WACH (1) = 6.000 ALPHA (1) = 30.000 TI = 98.900 Q1 = 3.118 HREF = .044

WACH (1) = 6.000 ALPHA (1) = 30.000 TI = 98.900 Q1 = 3.118 HREF = .044

WACH (1) = 6.000 ALPHA (1) = 30.000 TI = 98.900 Q1 = 3.118 HREF = .044

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WACH (1) = 6.000 ALPHA (1) = 30.000 TI = 98.900 Q1 = 3.118 HREF = .044

WACH (1) = 6.000 ALPHA (1) = 30.000 TI = 98.900 Q1 = 3.118 HREF = .044

AEDC VAS32 GMB 02 OPS. FUSELAGE (RTM84D)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION 1: OPERATES FUSELAGE DEPENDENT VARIABLE MU-ND

W/L	.6500	.6750	.7000	.7250	.7500	.7750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
Q=1												
.0000	.1349	.1350	.1371	.1349	.1194	.1233	.1142	.0000		.1193	.0000	.1167
21.000			.1333									
25.000						.0000						.0000
32.000												
35.000			.0000									
41.000			.0000									
66.000			.0000			.0000						
100.000			.0000			.0000						
106.000			.0000			.0000						
112.000							.0000					
113.000								.0000				

MACH (1) = 8.000 ALPHA (2) = 35.000 T1 = 98.900 Q1 = 3.118 MREF = .044

SECTION 1: OPERATES FUSELAGE DEPENDENT VARIABLE MU-ND

W/L	.0000	.0050	.0100	.0200	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
Q=1														
.000	.4264	.4931	.4320	.2981	.2473	.2136	.1893	.1595	.1444			.1332	.1284	.1185
10.000							.0000						.0000	.0000
14.070							.0000						.0000	.0000
20.000							.0000						.0000	.0000
24.500							.0000						.0000	.0000
35.000							.0000						.0000	.0000
42.000							.0000						.0000	.0000
48.000							.0000					.0000		
60.000							.0000						.0000	.0000
119.000			.0000			.0000	.0000			.0000				
140.000								.0000						
W/L	.1200	.1250	.1300	.1400	.1500	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
Q=1														
.000	.1147	.1086	.0992	.0931	.0825					.0327		.0910		
10.000				.0900										
20.000				.0600										
24.500				.0500										
40.000				.0500										
48.000				.0500										
140.000								.0000						
149.400														
149.800								.0000						
149.800								.0000						



WEDC VA352 OMIB 02 ORB. FUSELAGE

(R7K840)

$$\text{MACH} (1) = 8,000 \quad \text{ALPHA} (2) = 35,000$$

SECTION (1) ORBITER FUSELAGE

[illegible]

(RTK940)

AEDC VA332 Q449 02 ORG. FUSELAGE

WACH (1) = 5.000 ALPHA (2) = 35.000

SECTION 110000000 FUSELAGE

DEPENDENT VARIABLE PL/MD

PL	5000	5250	5500	5750	6000	6250	6500	6750	7000	7250	7500	7750	8000	8250	8500
P=1															
100.000	.0000				.0000				.0000				.0000		.0000
110.000					.0000										
120.000					.0000										
130.000					.0000						.0000				
140.000	.0000				.0000			.0000							
150.000					.0000			.0000			.0000				
160.000	.0000				.0000			.0000					.0000		
PL	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8500	.8750	.9000	.9250	.9500	.9750	1.0000
P=1															
20.000	.2102	.1945	.1803	.1683	.1570	.1516	.1461	.1408		.1459	.0000	.1408			
25.000			.1883			.0000	.0000					.0000			
30.000															
35.000			.0000												
40.000			.0000												
45.000			.0000												
50.000			.0000												
55.000			.0000												
60.000			.0000												
65.000			.0000												
70.000			.0000												
75.000			.0000												
80.000			.0000												
85.000			.0000												
90.000			.0000												
95.000			.0000												
100.000			.0000												
105.000			.0000												
110.000			.0000												
115.000			.0000												



AEDC VAS32 OHB 02 ORB, FUSELAGE

(RTKB41) (25 APR 74)

REFERENCE DATA

STEP = .0238 SQ.FT. XMRP = .0000 IN.
 REF = 22.3803 IN. XMRP = .0000 IN.
 STEP = 15.3919 IN. XMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .0000 RM/L = 3.350
 S, FLAP = .0000 ELEVON = .0000
 HAW/HT = 1.0000

WACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.600 QI = 3.536 HIEF = .046

SECTION (1) ORB FUSELAGE

DEPENDENT VARIABLE: HAW/HT

X/L	0.0000	0.0050	0.0100	0.0200	0.0250	0.0300	0.0400	0.0500	0.0600	0.0700	0.0750	0.0800	0.0900	0.1000
HAW/HT	.4577	.4956	.4260	.2749	.2277	.1966	.1684	.1400	.1260	.1160	.1092	.0992	.0900	.0800
10.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24.500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
35.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
39.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
42.500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
49.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
60.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
119.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
140.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1650	.1670	.1690	.1700	.1780	.1810	.1820
HAW/HT	.0978	.0906	.0842	.0762	.0660	.0560	.0466	.0366	.0266	.0166	.0066	.0000	.0000	.0000
10.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25.500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
40.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
45.500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
131.200	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
145.400	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
146.200	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
156.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
159.200	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
170.800	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
171.500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
173.400	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
190.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
X/L	.1830	.1900	.1910	.2000	.2250	.2300	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500
HAW/HT	.0745	.0675	.0600	.0526	.0434	.0362	.0263	.0163	.0063	.0000	.0000	.0000	.0000	.0000
10.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11.500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000



(RTKB41)

AEDC VA352 OH4B Q2 ORB. FUSELAGE

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION 11 ORBITER FUSELAGE

DEPENDENT VARIABLE HU/HQ

Y/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
0-1															
12.000								.0000							
21.500								.0769				.063			
23.000															
24.000				.0863											
31.500				.0987											
34.000								.0000							
35.000				.0964											
40.000				.0275				.0800							
45.000								.0740							
51.000				.0000				.0000							
57.500								.0000				.0000			
59.500								.0000							
61.000								.0000							
65.000								.0000							
70.000				.0000				.0000							
74.500								.0000							
105.000								.0000				.0000			
106.000								.0000				.0000			
135.000				.0000				.0000				.0000			
140.000								.0000							
141.400								.0000							
151.000				.0000				.0000							
156.000								.0000				.0000			
X/L	.9000	.9210	.9500	.9750	.0000	.0250	.0500	.0750	.7000	.7250	.7500	.7750	.8000	.8250	.8500
0-1															
.000				.0568	.0809	.0859	.0723	.0776	.0830	.0754	.1117	.1079	.1422	.1570	
21.500				.0564	.0526				.0860				.1298		
63.000									.0000				.0000		
64.000									.0000				.0000		
65.000					.0000				.0000				.0000		
65.500					.0000				.0000				.0000		
105.000				.0500					.0000				.0000		
111.000					.0000				.0000				.0000		
112.000					.0000				.0000				.0000		
113.000					.0000				.0000				.0000		
115.000					.0000				.0000				.0000		
135.000				.0000					.0000				.0000		
149.000				.0000					.0000				.0000		
150.000									.0000				.0000		
X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0250	1.0300	1.0300	1.0300	1.0300

0-1

(RTX541)

AEDC VAS32 O-4B 02 ORB. FUSELAGE

MACH (1) = 0.000 ALPHA (2) = 35.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/ND

Y/L .1200 .1250 .1300 .1350 .1400 .1450 .1500 .1550 .1600 .1620 .1670 .1700 .1750 .1780 .1800 .1810 .1820

0-1

156.000
153.200
150.700
147.900
145.400
143.000
140.600
138.200
135.800
133.400
131.000
128.600
126.200
123.800
121.400
119.000
116.600

Y/L .1630 .1650 .1670 .1690 .1710 .1730 .1750 .1770 .1790 .1810 .1830 .1850 .1870 .1890 .1910 .1930 .1950

0-1

.000
11.500
12.000
21.500
23.000
24.500
26.000
27.500
29.000
30.500
32.000
33.500
35.000
36.500
38.000
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84.500
86.000
87.500
89.000
90.500
92.000
93.500
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99.500
100.000

Y/L .1970 .1990 .2010 .2030 .2050 .2070 .2090 .2110 .2130 .2150 .2170 .2190 .2210 .2230 .2250 .2270 .2290 .2310 .2330 .2350 .2370 .2390 .2410 .2430 .2450 .2470 .2490 .2510 .2530 .2550 .2570 .2590 .2610 .2630 .2650 .2670 .2690 .2710 .2730 .2750 .2770 .2790 .2810 .2830 .2850 .2870 .2890 .2910 .2930 .2950 .2970 .2990 .3010 .3030 .3050 .3070 .3090 .3110 .3130 .3150 .3170 .3190 .3210 .3230 .3250 .3270 .3290 .3310 .3330 .3350 .3370 .3390 .3410 .3430 .3450 .3470 .3490 .3510 .3530 .3550 .3570 .3590 .3610 .3630 .3650 .3670 .3690 .3710 .3730 .3750 .3770 .3790 .3810 .3830 .3850 .3870 .3890 .3910 .3930 .3950 .3970 .3990 .4010 .4030 .4050 .4070 .4090 .4110 .4130 .4150 .4170 .4190 .4210 .4230 .4250 .4270 .4290 .4310 .4330 .4350 .4370 .4390 .4410 .4430 .4450 .4470 .4490 .4510 .4530 .4550 .4570 .4590 .4610 .4630 .4650 .4670 .4690 .4710 .4730 .4750 .4770 .4790 .4810 .4830 .4850 .4870 .4890 .4910 .4930 .4950 .4970 .4990 .5010 .5030 .5050 .5070 .5090 .5110 .5130 .5150 .5170 .5190 .5210 .5230 .5250 .5270 .5290 .5310 .5330 .5350 .5370 .5390 .5410 .5430 .5450 .5470 .5490 .5510 .5530 .5550 .5570 .5590 .5610 .5630 .5650 .5670 .5690 .5710 .5730 .5750 .5770 .5790 .5810 .5830 .5850 .5870 .5890 .5910 .5930 .5950 .5970 .5990 .6010 .6030 .6050 .6070 .6090 .6110 .6130 .6150 .6170 .6190 .6210 .6230 .6250 .6270 .6290 .6310 .6330 .6350 .6370 .6390 .6410 .6430 .6450 .6470 .6490 .6510 .6530 .6550 .6570 .6590 .6610 .6630 .6650 .6670 .6690 .6710 .6730 .6750 .6770 .6790 .6810 .6830 .6850 .6870 .6890 .6910 .6930 .6950 .6970 .6990 .7010 .7030 .7050 .7070 .7090 .7110 .7130 .7150 .7170 .7190 .7210 .7230 .7250 .7270 .7290 .7310 .7330 .7350 .7370 .7390 .7410 .7430 .7450 .7470 .7490 .7510 .7530 .7550 .7570 .7590 .7610 .7630 .7650 .7670 .7690 .7710 .7730 .7750 .7770 .7790 .7810 .7830 .7850 .7870 .7890 .7910 .7930 .7950 .7970 .7990 .8010 .8030 .8050 .8070 .8090 .8110 .8130 .8150 .8170 .8190 .8210 .8230 .8250 .8270 .8290 .8310 .8330 .8350 .8370 .8390 .8410 .8430 .8450 .8470 .8490 .8510 .8530 .8550 .8570 .8590 .8610 .8630 .8650 .8670 .8690 .8710 .8730 .8750 .8770 .8790 .8810 .8830 .8850 .8870 .8890 .8910 .8930 .8950 .8970 .8990 .9010 .9030 .9050 .9070 .9090 .9110 .9130 .9150 .9170 .9190 .9210 .9230 .9250 .9270 .9290 .9310 .9330 .9350 .9370 .9390 .9410 .9430 .9450 .9470 .9490 .9510 .9530 .9550 .9570 .9590 .9610 .9630 .9650 .9670 .9690 .9710 .9730 .9750 .9770 .9790 .9810 .9830 .9850 .9870 .9890 .9910 .9930 .9950 .9970 .9990

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(RTK941)

AEDC VA352 Q4B 02 ORB. FUSELAGE

MACH 1.1 = 8.000 ALPHA (2) = 35.000

SECTION 1 (1) ORB. FUSELAGE

DEPENDENT VARIABLE MU/HO

X/Y	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
P41															
1.00.000	.0000				.0000				.0000				.0000		.0000
1.11.000					.0000										
1.12.000					.0000										
1.13.000					.0000										
1.14.000					.0000				.0000		.0000				
1.15.000	.0000				.0000				.0000		.0000				
1.16.000	.0000				.0000				.0000		.0000				
1.17.000					.0000				.0000		.0000				
1.18.000					.0000				.0000		.0000				
P42															
1.19.000	.0000	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0390	1.0500			
P43															
1.20.000	.2277	.0687	.1954	.1895	.1631	.1643	.1602	.0000		.1529	.0000	.1422			
1.21.000			.1963												
1.22.000						.0000									
1.23.000						.0000									
1.24.000						.0000									
1.25.000						.0000									
1.26.000						.0000									
1.27.000						.0000									
1.28.000						.0000									
1.29.000						.0000									
1.30.000						.0000			.0000						

AEDC VA352 QMB 02 ORB. FUSELAGE

(RTN542) (25 APR 74)

REFERENCE DATA

REF = 15238 SUFF. KMP = 10000 IN.
REF = 223403 IN. WMP = 10000 IN.
REF = 163515 IN. ZMP = 10000 IN.
SCALE = 10175 SCALE

PARAMETRIC DATA

DELTA = .0000 RAY = 3.720
DELTA = .0000 RAY = 3.720
DELTA = .0000 RAY = 3.720

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.060 QI = 3.937 REF = 1045

SECTION 1 (1) ORB. FUSELAGE

DEPENDENT VARIABLE MU/C

Y%	1000	10000	10100	10200	10300	10400	10500	10600	10700	10800	10900	11000	11100	11200	11300	11400	11500	11600	11700	11800	11900	12000
REF	1000	10000	10100	10200	10300	10400	10500	10600	10700	10800	10900	11000	11100	11200	11300	11400	11500	11600	11700	11800	11900	12000
1000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10100	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10200	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10300	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10400	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10600	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10700	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10800	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10900	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11100	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11200	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11300	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11400	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11600	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11700	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11800	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11900	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
12000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000



(RTK842)

AEDC VA352 OH4B OR ORB. FUSELAGE

MACH (1) = 9.000 ALPHA (1) = 30.000

SECTION 11 ORBITER FUSELAGE

DEPENDENT VARIABLE HUMHO

W/L	.1635	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
Unit															
12.000								.0000				.0677			
21.000								.0784							
22.000															
24.000				.0670											
31.000				.1013											
34.000								.0000							
35.000				.0981											
40.000				.0995											
45.000								.0769							
51.000				.0000				.0000							
57.000								.0000							
59.000								.0000							
61.000								.0000							
65.000								.0000							
70.000								.0000							
78.000				.0000											
85.000								.0000							
105.000								.0000							
106.000								.0000							
135.000								.0000							
136.000								.0000							
140.000				.0000				.0000							
141.400															
141.000				.0000											
142.000				.0000				.0000							
Unit															
15.000	.0582	.0609	.0596	.0634	.0694	.0775	.0866	.0962	.1049	.1236	.1390	.1466	.1771	.1898	
21.000	.0750				.0989				.1032				.1679		
40.000									.0000						
61.000									.0000				.0000		
78.000					.0000				.0000				.0000		
105.000	.0600				.0000				.0000				.0000		.0000
111.000															
112.000					.0000										
113.000					.0000										
114.000					.0000						.0000				
145.000	.0000				.0000				.0000						
147.000					.0000				.0000						
148.000	.0000				.0000				.0000				.0000		
Unit															
15.000	.0750	.0750	.0900	.0250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0360	1.0390			

AEDC VA352 CHMB OR ORB. FUSELAGE (RTKB42)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/NO

Y/L	.9500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0360	1.0400
PHI												
.000	.1899	.1913	.1893	.1847	.1706	.1416	.1371	.0000		.1309	.0000	.1262
21.900		.1733										
39.000					.0000		.0000					.0000
52.900			.0000									
65.000			.0000									
84.000					.0000							
100.000			.0000									
129.000			.0000		.0000							
152.000						.0000						
173.000							.0000					

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.080 Q1 = 3.937 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/NO

Y/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0800	.0900	.1000
PHI														
.000	.4277	.4916	.4268	.2970	.2476	.2157	.1906	.1502	.1446		.1342	.1266	.1172	.0000
10.000							.0000							.0000
14.000							.0000							.0000
20.000							.0000							.0000
22.000							.0000							.0000
24.900							.0000							.0000
39.000							.0000							.0000
42.500							.0000							.0000
46.000							.0000				.0000			.0000
60.000							.0000							.0000
119.000							.0000			.0000				.0000
140.000			.0000		.0000									.0000

Y/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1670	.1690	.1700	.1760	.1800	.1810	.1820
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PHI

.000	.1155	.1063	.1001	.0922	.0937					.0926	.0913			
10.000				.0000						.0000				.0000
20.000				.0000										.0000
25.900				.0000										.0000
40.000				.0000										.0000
45.000				.0000										.0000
131.200							.0000							.0000
149.400							.0000							.0000
146.200							.0000							.0000



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA352)

PAGE 291

(RTK042)

AEDC VA352 O-48 OR OPS. FUSELAGE

WACH 1114 0.000 ALPHA (2) = 35.000

SECTION (1) OVER FUSELAGE DEPENDENT VARIABLE MU/HQ

X/Z .1200 .1250 .1300 .1350 .1400 .1450 .1500 .1550 .1600 .1650 .1700 .1750 .1800 .1810 .1820

PHI

156.000

159.200

170.000

171.000

173.400

170.000

X/Z

.1630 .1670 .1710 .1750 .1800 .1850 .1900 .1950 .2000 .2050 .2100 .2150 .2200 .2250 .2300

PHI

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(26X1942)

AE0C VA352 0449 02 008. FUSELAGE

$$\alpha_{\text{HMA}}(1) = 0.000 \quad \alpha_{\text{HMA}}(2) = 35.000$$

DEPENDENT VARIABLE HUND

377-381 63016011 001:0-3

Year	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418
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AEDC VAS352 0448 01+110 0285, BOTTOM SURFACE WING (RTKLO1) (25 APR 74)

REFERENCE DATA

STEP = .6236 IN. HREF = .0000 IN.
 STEP = 22.5003 IN. HREF = .0000 IN.
 STEP = 16.3319 IN. HREF = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
 S.F. CAP = .000 ELEVON = .000
 MAX/MIN = 1.000

MACH (1) = 0.000 ALPHA (1) = -10.000 TI = 97.800 Q1 = 3.935 HREF = .049

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE HI/40

2+16 .2500 .3010 .3480 .4000 .5000 .6000 .7500 .8500 .9000 .9500 .9680 .9930

R/C

.001	.0494	.0504	.2833	.4914	.2852	.1058	.2612	.1306	.0368
.002				.4798		.1665			
.003				.2856		.1147			
.004				.1675		.0727			
.005				.1312		.0625			
.006				.0912		.0354			
.007				.0643		.0307			
.008	.0776		.1450	.1606	.2287				
.009			.0320		.0623	.0636		.1302	.1383
.010	.0312			.0452					
.011			.0200						
.012			.0143	.0245					
.013	.0201			.0179		.0363	.0365	.0639	
.014			.0175						
.015					.0332				
.016	.0277			.0219					
.017			.0200						
.018			.0548		.0335	.0393		.0445	
.019	.0213								
.020			.0376	.0327			.0190		
.021			.0359	.0223	.0139			.0180	
.022	.0000								
.023				.0130	.0111				
.024				.0109	.0114				
.025	.0518		.0192	.0195	.0228	.0087		.0125	

AEDC VA352 C-4B 1/2 MID ORG, BOTTOM SURFACE WING (RTKLD1)

MACH (1) = 8.000 ALPHA (2) = 0.000 T1 = 97.600 Q1 = 3.935 WEP = .049

SECTION 1: BOTTOM SURF. WING DEPENDENT VARIABLE HI/LO

2+3 .2500 .3010 .3480 .4000 .5000 .6000 .7500 .8500 .9000 .9500 .9860 .9930

K/C

.001	.0201	.0324	.2404	.4096	.3071	.1129	.1228	.124	.0315
.002			.3936	.1862					
.003			.2304	.1336					
.004			.1478	.0791					
.005			.1112	.0438					
.006			.0704	.0402					
.007			.0479	.0423					
.008	.0726	.1108	.1408		.2431				
.009							.1008		
.010		.0269		.0419	.0807	.0616	.0374		
.015	.0190								
.017		.0144	.0197	.0245					
.020	.0294								
.025		.0192	.0143		.0429	.0459	.0549		
.030	.0209								
.035				.0161	.0301				
.040	.0237							.0471	
.045		.0073			.0243	.0364			
.050		.0416							
.055	.0178		.0294	.0131		.0179			
.060		.0043	.0290	.0161	.0102		.0266		
.065	.0000			.0174	.0091				
.070				.0218	.0006				
.075	.0398	.0194	.0199	.0171	.0076		.0172		

MACH (1) = 8.000 ALPHA (3) = .000 T1 = 97.600 Q1 = 3.935 WEP = .049

SECTION 1: BOTTOM SURF. WING DEPENDENT VARIABLE HI/LO

2+3 .2500 .3010 .3480 .4000 .5000 .6000 .7500 .8500 .9000 .9500 .9860 .9930

K/C

.001	.0184	.0327	.2109	.3316	.2910	.0915	.1206	.1050	.0279
.002				.3449		.1503			
.003				.2141		.1149			
.004				.1412		.0782			
.005				.1115		.0599			
.006				.0700		.0406			
.007				.0479		.0379			
.008	.0282	.1027	.1297		.2482				

STABULATED DATA LISTING FOR OMA3 (AEDC VA332)

(R7XLO1)

$$\text{MACH (1)} = 8.000 \quad \text{ALPHA (3)} = .000$$

AECC VA332 046B 01 + 110 ORG. BOTTOM SURFACE WING

SECTION (1) BOTTOM SURF. WING

[illegible]

28

.050	.0314	.0426	.0664	.0789	.1083
.100					.1083
.153	.0151				
.177		.0191			
.200	.0181	.0242			
.299	.0204				
.300		.0151	.0141	.0361	.0469
.302	.0132				
.303			.0344		
.429		.0165			
.444	.0207				
.497		.0114		.0331	.0326
.500	.0441		.0289		
.519					
.550	.0189				
.560		.0236	.0127		
.700	.0251	.0261	.0145	.0234	.0194
.726	.0000		.0122		
.800			.0148	.0121	
.850			.0206	.0100	
.900	.0178	.0175	.0191	.0099	.0151
.900	.0362				

MASS (1) =	8 000	ALPHA (4) =	5 000	YI	=	97 600	QI	=	3 935	HEF	=	.049
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SECTION (1) BOTTOM SURF. WING

24	.2500	.3460	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9860	.9930
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5/8

.001	.0384	.0396	.2180	.3335	.2999	.0828	.1325
.002				.3620		.1485	
.003				.2567		.1183	
.004				.0880		.0880	
.005				.1378		.0663	
.006				.1009		.0477	
.007				.0754		.0431	
.008			.1345	.1479	.2685		.1164
.010			.0438	.0239	.0880	.0610	.1136
.020							
.030			.0293				
.040			.0228	.0328			
.050							
.060							
.070							
.080							
.090							
.100							
.110							
.120							
.130							
.140							
.150							
.160							
.170							
.180							
.190							
.200							
.250							
.300							
.350							
.400							
.450							
.500							
.550							
.600							
.650							
.700							
.750							
.800							
.850							
.900							
.950							
1.000							

(377,01)

AEDC VA352 0-48 CL+HG DBB, 90TDM SURFACE WING

MACH (1) = 8.000 ALPHA (4) = 5.000

SECTION (1) 1/4 CHORD SURF. WING DEPENDENT VARIABLE WING

X/Y 2500 3500 3480 4000 5000 6000 7000 8000 9000 9500 9800 9900

X/C

.903						.0223					
.428					.0229						
.444	.0198										
.487				.0142		.0431	.0409		.0182		
.500											
.529			.0279								
.550	.0229							.0218			
.600				.0188	.0182						
.700			.0084	.0339	.0190	.0172			.0201		
.750	.0000										
.900					.0184	.0184					
.950					.0148	.0179					
.990	.0452		.0304	.0328	.0119	.0143			.0172		



MACH (1) = 6.000 BETA (2) = .000 Y1 = 97.350 Q1 = 3.942 HREF = .049 (RPMLO2)

SECTION 1: BOTTOM SURF. WING

DEPENDENT VAR VALUE H1/H0

ZYR	2500	3010	3480	4000	5000	6000	7500	8500	9000	9500	9900	9930
X/C												
.001		.014	.0227		.2108	.3358	.2950	.0313		.1258	.1058	.0279
.002						.3449		.1103				
.003						.2151	.1149					
.004						.1412	.0762					
.005						.1115	.0590					
.006						.0900	.0466					
.007						.0759	.0375					
.008				.1097	.1297		.2462					
.009				.0314		.0426	.0664	.0789		.1093	.1063	
.010					.0191							
.011				.0181		.0242						
.012					.0151	.0141		.0381	.0411	.0489		
.013				.0132			.0344					
.014						.0165						
.015					.0114						.0326	
.016				.0441			.0289	.0331				
.017					.0233	.0127			.0234			
.018				.0061	.0061	.0145	.0122			.0154		
.019						.0148	.0121					
.020						.0225	.0130					
.021				.0178	.0175	.0151	.0070				.0181	
.022												



AE0C VA352 CHAB 01+710 CRS. BOTTOM SURFACE WING

REFERENCE DATA

PARAMETRIC DATA

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STEP = .0238 SQ.FT.  WTP = .0000 IN.  BETA = .000  TW/L = .000
DEF = 22.5803 IN.  WTP = .0000 IN.  B.FLAP = .000  ELEVON = .000
DEF = 10.3919 IN.  WTP = .0000 IN.  WAW/HT = 1.000
SCALE = .0179 SCALE

```

Parameter	Value	Unit	Value	Unit	Value	Unit
α	0.001		0.001		0.001	
β	0.001		0.001		0.001	
γ	0.001		0.001		0.001	
δ	0.001		0.001		0.001	
ϵ	0.001		0.001		0.001	
ζ	0.001		0.001		0.001	
η	0.001		0.001		0.001	
θ	0.001		0.001		0.001	
ι	0.001		0.001		0.001	
κ	0.001		0.001		0.001	
λ	0.001		0.001		0.001	
μ	0.001		0.001		0.001	
ν	0.001		0.001		0.001	
ξ	0.001		0.001		0.001	
\omicron	0.001		0.001		0.001	
π	0.001		0.001		0.001	
ρ	0.001		0.001		0.001	
σ	0.001		0.001		0.001	
τ	0.001		0.001		0.001	
υ	0.001		0.001		0.001	
ϕ	0.001		0.001		0.001	
χ	0.001		0.001		0.001	
ψ	0.001		0.001		0.001	
ω	0.001		0.001		0.001	
δ	0.001		0.001		0.001	
ϵ	0.001		0.001		0.001	
ζ	0.001		0.001		0.001	
η	0.001		0.001		0.001	
θ	0.001		0.001		0.001	
ι	0.001		0.001		0.001	
κ	0.001		0.001		0.001	
λ	0.001		0.001		0.001	
μ	0.001		0.001		0.001	
ν	0.001		0.001		0.001	
ξ	0.001		0.001		0.001	
\omicron	0.001		0.001		0.001	
π	0.001		0.001		0.001	
ρ	0.001		0.001		0.001	
σ	0.001		0.001		0.001	
τ	0.001		0.001		0.001	
υ	0.001		0.001		0.001	
ϕ	0.001		0.001		0.001	
χ	0.001		0.001		0.001	
ψ	0.001		0.001		0.001	
ω	0.001		0.001		0.001	
δ	0.001		0.001		0.001	
ϵ	0.001		0.001		0.001	
ζ	0.001		0.001		0.001	
η	0.001		0.001		0.001	
θ	0.001		0.001		0.001	
ι	0.001		0.001		0.001	
κ	0.001		0.001		0.001	
λ	0.001		0.001		0.001	
μ	0.001		0.001		0.001	
ν	0.001		0.001		0.001	
ξ	0.001		0.001		0.001	
\omicron	0.001		0.001		0.001	
π	0.001		0.001		0.001	
ρ	0.001		0.001		0.001	
σ	0.001		0.001		0.001	
τ	0.001		0.001		0.001	

DEPENDENT VARIABLE HIGH

[illegible]

27

Year	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413
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MACH (1) = 8.000 ALPHA (2) = -9.000 T1 = 93.425 Q1 = .662 REF = .020 (RTKLOS)

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE H1/H0

21/3	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0239	.0317		.2348	.3978	.2983	.1176		.1339	.0593	.0264
.002					.3906	.3906		.1093				
.003					.2179			.1286				
.004					.1477			.0848				
.005					.1128			.0652				
.006					.0794			.0467				
.007					.0600			.0414				
.025	.0820			.0986	.1399		.2403					
.040				.0292		.0405	.0607	.0608		.1198		
.100	.0106									.1060		
.153					.0213							
.177				.0127		.0241						
.200					.0152	.0143		.0410	.0484	.0571		
.299	.0110						.0309					
.300				.0090								
.302												
.303												
.428	.0102				.0052		.0234	.0342		.0353		
.444												
.500				.0062								
.559												
.590	.0078				.0071	.0104		.0172				
.600				.0024	.0087	.0057	.0095			.0198		
.700												
.736	.0000											
.800					.0030	.0086						
.850					.0042	.0094						
.900	.0203			.0119	.0078	.0035	.0075			.0136		

MACH (1) = 8.000 ALPHA (3) = .000 T1 = 93.425 Q1 = .662 REF = .020

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE H1/H0

21/3	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0178	.0237		.2034	.3390	.2918	.0870		.1348	.1068	.0279
.002					.3417			.1461				
.003					.2263			.1087				
.004					.1482			.0897				
.005					.1165			.0607				
.006					.0808			.0534				
.007					.0630			.0470				
.025	.0283			.0991	.1890		.2496					

AEDC VA352 0-4 E 3:11.0 CRB. BOTTOM SURFACE WING (RTK1.03)

$$\text{MACH} (1) = 8.500 \quad \text{ALPHA} (4) = 5.000$$

SECTION: 115077M SURF. WING

DEPENDENT VARIABLE: HIND

Year	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1950	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100

22

305.

.429

...

45.

565

6

235

55

752

25

3.12

34

3

25

0441

0258

6120.

2010.

05000

0120'

(RTKL04) (23 APR 74)

AEDC VA352 Q4B Q1+T10 ORB, BOTTOM SURFACE WING

REFERENCE DATA

WREF = .8230 33.1 FT. XWRP = .0000 IN.
 LREF = 22.5803 IN. YWRP = .0000 IN.
 BREF = 16.3919 IN. ZWRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 RN/L = .680
 B.F.LAP = .000 ELEVON = .000
 HAW/HT = 1.000

MACH (1) = 6.000 BETA (1) = -2.000 T1 = 93.550 Q1 = .881 HREF = .020

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE HI/LO

21/9 .2500 .3010 .3480 .4000 .5000 .6000 .7500 .8500 .9000 .9500 .9860 .9930

K/C

.001	.0300	.0379	.2515	.4899	.4166	.1314	.1620	.1399	.0597
.002			.7037	.2418					
.003			.3085	.1263					
.004			.11921	.0773					
.005			.1485	.0651					
.006			.1056	.0948					
.007			.0839	.0483					
.008	.0453	.1110	.1560	.2533			.1565		
.009		.0332		.0640	.0910		.1537		
.010	.0135		.0261						
.011		.0242		.0328					
.012	.0047		.0207	.0190	.0479	.0607	.0622		
.013		.0167			.0489				
.014	.0032			.0249					
.015			.0177		.0454	.0492	.0415		
.016		.0099							
.017	.0049		.0141	.0179			.0205		
.018		.0066	.0099	.0138	.0162			.0262	
.019	.0000			.0066	.0152				
.020				.0104	.0158				
.021	.0261	.0108	.0049	.0079	.0120			.0182	

DATE 23 SEP 74

TABULATED DATA LISTING FOR OM48 (AEDC VA332)

PAGE 284

WACH (1) = 5.000 BETA (2) = .000 Y1 = 93.450 Q1 = .681 HREF = .020 (RTALQ4)

SECTION (1) BOTTOM SURF. WING

DEPENDENT VARIABLE HI/LO

Z/Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9930
Y/C											
.001		.0176	.0237		.2034	.3390	.2018	.0870		.1348	.1046
.002						.3417		.1461			.0279
.003						.2283		.1077			
.004						.1482		.0707			
.005						.1185		.0617			
.006						.0908		.0531			
.007						.0630		.0470			
.008	.0283			.0991	.1290		.2498				
.009				.0353		.0453	.0667	.0728		.1118	.1089
.010	.0683										
.011				.0195	.0224	.0277					
.012	.0044										
.013				.0129	.0185	.0148		.0397	.0453	.0488	
.014	.0109					.0189	.0341				
.015					.0133			.0265	.0379	.0339	
.016				.0080							
.017	.0102										
.018				.0024	.0098	.0140			.0188		
.019	.0000				.0066	.0101	.0117			.0189	
.020											
.021				.0113	.0094	.0062	.0113				
.022	.0135					.0066	.0128				
.023					.0027	.0103					.0143

TABULATED DATA LISTING FOR Q448 (AEDC VAS32)

(RTKLOS)

MACH (1) = 0.000 ALPHA (3) = .000

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE HEAD

RTK	.2500	.3010	.3460	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
.090				.0000		.0000	.0000	.0000		.0000		
.100				.0000		.0000	.0000	.0000		.0000		
.150	.0000											
.177				.0000	.0000							
.200				.0000	.0000							
.209	.0000				.0000	.0000		.0000	.0000	.0000		
.300				.0000	.0000	.0000	.0000	.0000	.0000	.0000		
.302				.0000			.0000					
.303						.0000						
.429						.0000						
.444	.0000				.0000		.0000	.0000		.0000		
.479					.0000							
.500				.0000			.0000	.0000		.0000		
.579												
.600	.0000				.0000	.0000	.0000		.0000	.0000		
.670				.0000	.0000	.0000	.0000					
.770	.0000					.0000	.0000	.0000	.0000	.0000		
.800						.0000	.0000	.0000				
.870						.0000	.0000	.0000				
.900				.0000	.0000	.0000	.0000	.0000				
.960						.0000						

AE0C VA392 C-49 01 009, BOTTOM SURFACE WING (RTK-10) (25 APR 74)

REFERENCE DATA

9000	=	.0230	90.07.	1400	=	.0000	IN.
1000	=	22.503	IN.	1400	=	.0000	IN.
2000	=	16.3015	IN.	2400	=	.0000	IN.
SCALE	=	.0175	SCALE				

PARAMETRIC DATA

BETA	=	.000	REVL	=	3.720
B_FLAB	=	.000	ELFON	=	.000
RAW/HT	=	1.000			

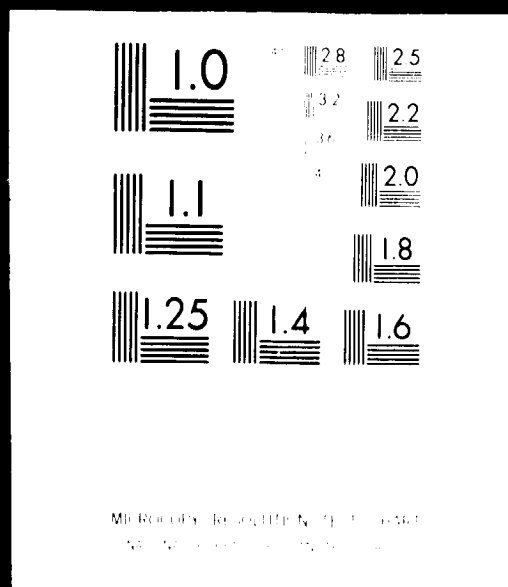
$$w_A = 0.005 \quad A^{B \rightarrow A}(1) = 5,000 \quad T1 = 50,000 \quad q1 = 3,361 \quad r_{EF} = .049$$

REGRESSION EQUATION INDEPENDENT VARIABLE DEPENDENT VARIABLE

[illegible]

5 of 7

N75 18290 UNCLAS



DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-8 (AEDC VA352)

PAGE 270

AEDC VA352 OH-8 Q1 ORB. BOTTOM SURFACE WING (RTKL11) (23 APR 74)

REFERENCE DATA

STEP = .8238 SQ.FT. XMRP = .0000 IN.
 LREF = 22.3803 IN. YMRP = .0000 IN.
 BREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .880
 B.FLAP = .000 ELEVON = .000
 HAW/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = -8.000 T1 = 93.000 Q1 = .877 HREF = .020

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE H1/H0

2 Y/B .2500 .3010 .3480 .4000 .5000 .6000 .7500 .9000 .9300 .9660 .9930

X/C

.001	.0175	.0261	.2465	.4339	.2568	.0872	.1195	.0930	.0161
.002			.3881	.3881	.1384				
.003			.2462	.1032					
.004			.1745	.0767					
.005			.1398	.0257					
.006			.0994	.0413					
.007			.0673	.0352					
.008			.1985	.1987					
.009			.0292	.0423	.0261	.0621	.0904	.0903	
.010			.0097						
.011			.0113	.0244					
.012			.0131	.0143	.0310	.0284	.0340		
.013			.0081						
.014				.0160	.0302				
.015			.0154		.0237	.0319	.0198		
.016			.0043						
.017			.0036	.0089	.0084	.0102	.0114		
.018			.0023	.0082	.0044	.0068			
.019			.0011	.0036	.0036	.0080			
.020			.0019	.0040	.0031	.0066	.0105		

DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-6 (AEDC VA332)

PAGE 271

MACH (1) = 8.000 ALPHA (2) = .001		AEDC VA332 OH-6 OI		ORB. BOTTOM SURFACE WING		(RTKL11)	
SECTION (1) BOTTOM SURF. WING		DEPENDENT VARIABLE H _{U/HO}		TI = 93.000 OI =		.877 HREF = .020	
Z/Y/B	.2500 .3010 .3480	.4000 .5000	.6000 .7500 .8500 .9000 .9500 .9800 .9930				
X/C							
.001	.0340 .0415	.2768	.4512 .2585 .0807				
.002			.4243 .1536		.1250	.1025	.0256
.003			.2871 .1160				
.004			.2096 .0883				
.005			.1573 .0574				
.006			.1236 .0482				
.007			.0870 .0411				
.008	.0364	.1509 .1859	.2236				
.009							
.010		.0467	.0557 .0715 .0775		.1081	.1052	
.011	.0192						
.012		.0257	.0313				
.013		.0236					
.014		.0212 .0195	.0340 .0352 .0422				
.015		.0188					
.016			.0470				
.017			.0243				
.018		.0228					
.019		.0137	.0323 .0294		.0246		
.020							
.021		.0159 .0143					
.022	.0108 .0135	.0131 .0121	.0131		.0135		
.023							
.024			.0071 .0106				
.025			.0087 .0122				
.026		.0095 .0089	.0081 .0096				
.027	.0037				.0116		

(RTL12) (25 APR 74)

REFERENCE DATA

REF = .0236 SQ.FT. 1MRP = .0000 IN.
 LREF = 22.5803 IN. 1MRP = .0000 IN.
 SREF = 16.3919 IN. 2MRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .0000 ON/L = .500
 S.F.LAP = .0000 ELEVON = .000
 HAW/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.400 Q1 = .324 HREF = .018

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE MU/40

2Y/S .2500 .3010 .3480 .4000 .5000 .6000 .7500 .8500 .9000 .9500 .9660 .9930

X/C

.001	.0231	.0301	.4068	.2716	.3096	.0822	.1362	.0908	.0391
.002			.2908	.1755					
.003			.3082	.1669					
.004			.2802	.1509					
.005			.2436	.1367					
.006			.2122	.1141					
.007			.1774	.1018					
.0443		.1724	.3612	.3137					
.0610		.1369		.1229	.1534	.1768	.1261		
.100							.1059		
.153			.1021						
.177		.0867		.0811					
.200									
.299		.0540		.0726	.0689	.1080	.0964		
.302			.0741						
.303					.0764				
.426				.0668					
.444		.0509							
.467			.0667		.0769	.0698	.0666		
.500		.0807							
.599									
.590		.0360							
.600			.0765	.0873			.0431		
.700		.0555	.0879	.0491	.0351			.0536	
.736		.0424							
.800			.0282	.0323					
.850			.0383	.0412					
.900		.0133	.0311	.0392	.0355	.0366		.0491	

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.400 QI = .524 WEF = .018
 AEDC VA352 OH-6 O1 ORB. BOTTOM SURFACE WING (RTKL12)

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

Z/B	.2500	.3010	.3460	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9680	.9930
X/C		.0476	.0304		.3781	.2581	.2842	.0734		.1259	.0883	.0342
.001						.3429	.1637					
.002						.3122	.1606					
.003						.3395	.1511					
.004						.2820	.1389					
.005						.2890	.1141					
.006						.2369	.1037					
.007							.2983					
.025	.0430			.1723	.3964					.1228		
.050				.1427		.1608	.1062	.1678		.1248		
.100												
.153	.0989				.1043							
.177												
.200				.0980		.1189						
.299	.0847				.0966	.0329		.0813	.1122	.1167		
.300												
.302				.0323			.0987					
.303						.1020						
.428												
.444	.0568											
.487					.0994		.0871	.0858		.0807		
.500												
.559				.0851								
.590	.0437				.0716	.0861			.0423			
.600					.0631	.0539	.0429			.0450		
.700				.0598								
.736	.0500					.0325	.0380					
.800						.0443	.0500					
.850						.0404	.0443			.0463		
.900	.0186			.0350	.0462	.0404						

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.400 QI = .524 WEF = .018

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

Z/B	.2500	.3010	.3460	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9680	.9930
X/C		.0612	.0298		.3474	.3141	.2598	.0838		.1108	.0755	.0396
.001						.4412	.1430					
.002						.4219	.1445					
.003						.4409	.1397					
.004						.3742	.1320					
.005						.3418	.1159					
.006						.2823	.1091					
.007							.2828					
.025	.0448			.1522	.3388							

TABULATED DATA LISTING FOR OHB (AEDC VA352)

MACH (1) = 0.000 ALPHA (2) = 35.000 T1 = 94.100 Q1 = 1.003 WREF = .025 (RTKL13)

SECTION (1) BOTTOM SURF. WING

DEPENDENT VARIABLE MU/NO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001	.0031	.0295		.3422	.3092	.2538	.0830					
.002				.4307			.1375			.1075	.0602	.0500
.003				.4006			.1369					
.004				.4209			.1297					
.005				.3677			.1218					
.006				.3402			.1065					
.007				.2801			.0978					
.008				.1489	.3378		.2724					
.009												
.010				.1473		.1920	.1885	.1724		.1090		
.013										.1099		
.017					.1001							
.020				.1011		.1391						
.029												
.030				.0680	.0920	.0966		.1046	.1498	.1565		
.032												
.033							.1082					
.044					.1136							
.047							.0966	.0966		.1298		
.050				.0966								
.059												
.060				.0732	.0899				.0822			
.070				.0831	.0834	.0566	.0816			.0708		
.0736												
.080					.0333	.0427						
.090					.0806	.0607						
.0920				.0411	.0497	.0456	.0533			.0801		

MACH (1) = 0.000 ALPHA (3) = 40.000 T1 = 94.100 Q1 = 1.003 WREF = .025

SECTION (1) BOTTOM SURF. WING

DEPENDENT VARIABLE MU/NO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001	.0019	.0319		.3052	.2928	.2439	.0833					
.002				.3653			.1196			.0236	.0702	.0423
.003				.4269			.1290					
.004				.4075			.1276					
.005				.3761			.1243					
.006				.3298			.1148					
.007				.2853			.1098					
.023	.0473		.1427	.3085		.2843						

(RTKL13)

MACH (1) = 0.000 ALPHA (3) = 40.000

SECTION (1) BOTTOM SURF. WING

DEPENDENT VARIABLE MU/40

27/8	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9680	.9930
1/C												
.080				.1466		.2111	.1948	.1819		.0972		
.100										.1004		
.133	.1139											
.177					.0873							
.200				.1049	.1388							
.299	.0658											
.300					.0909	.0987	.1179	.1285	.1179			
.302				.0910								
.303							.1127					
.428					.1146							
.444	.0740											
.487					.1234							
.500							.1079	.1086		.1004		
.559				.0721								
.590	.0598				.0797	.0878			.0537			
.600				.0889	.0894	.0832	.0879					
.700												
.736	.0878											
.800					.0371	.0468						
.850					.0595	.0869						
.900	.0281			.0447	.0536	.0564	.0634			.0674		

AEDC VA352 OMB 01 ORB. BOTTOM SURFACE WING (RTKL14) (23 APR 74)

REFERENCE DATA

WREF = .8238 SQ.FT. WREF = .0000 IN.
 LREF = 22.9803 IN. WREF = .0000 IN.
 BREF = 16.3919 IN. WREF = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RH/L = 2.000
 S.FLAP = .000 ELEVON = .000
 HAWAHT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 T1 = 96.950 Q1 = 1.994 HREF = .035

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE MU/RO

21/9	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9860	.9930
K/C												
.001		.0336	.0291		.3734	.2517	.2060	.0768		.1213	.0806	.0640
.002						.3325		.1638				
.003						.2999		.1974				
.004						.3326		.1509				
.005						.2779		.1412				
.006						.2827		.1264				
.007						.2300		.1204				
.008	.0431			.1338	.3501		.2060					
.009				.1408		.1562	.1970	.1960		.1189		
.010										.1214		
.013	.0944				.0958							
.017				.0954		.1142						
.200	.0872				.0968	.1001		.2898	.1708	.1321		
.300				.0792								
.302							.1050					
.303							.1009					
.428												
.444	.0557				.0934			.0880	.2746		.1593	
.487				.0840								
.500												
.559	.0428											
.750					.0715	.0836			.1300			
.756	.0826			.0820	.0862	.0465	.0452			.1219		
.800						.0296	.0321					
.850						.0428	.0503					
.900	.0356			.0408	.0472	.0390	.0445			.1111		



AEDC VAS32 OMB 01 ORB. BOTTOM SURFACE WING (RTUL13) (23 APR 74)

REFERENCE DATA

WING = .0238 30 FT. WING = .0000 IN.
 REF = 22.5603 IN. WING = .0000 IN.
 REF = 16.3919 IN. WING = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 IN/L = 3.720
 S.F.LAP = .000 ELEVON = .000
 HAW/HT = 1.000

WING (1) = 0.000 ALPHA (1) = 25.000 T1 = 97.007 Q1 = 3.955 MREF = .049

SECTION (1) SURFACE WING

DEPENDENT VARIABLE MU/RO

210 .2510 .3010 .3480 .4000 .5000 .6000 .7500 .8500 .9000 .9500 .9930

T/C

.001	.0497	.0294	.3644	.2793	.3224	.2814	.1326	.0318	.0480
.002			.2640	.2640	.1730				
.003			.2583	.2583	.1640				
.004			.2502	.2502	.1520				
.005			.2376	.2376	.1356				
.006			.2089	.2089	.1126				
.007			.1710	.1710	.1014				
.008	.0420	.1811	.3564	.3537					
.009		.1381		.1264	.2741	.1781	.1221		
.010	.0401						.1219		
.011		.0668	.0970	.0778					
.012	.0846		.1186	.1344	.1985	.1027	.1006		
.013		.0721			.3280				
.014	.0487		.3402	.2810					
.015		.0723		.3303	.2640		.0949		
.016	.0400								
.017		.1689	.1689	.0666		.1073			
.018	.0480	.0663	.2026	.1998	.1343		.1117		
.019				.1171	.1324				
.020				.1464	.1537				
.021	.0414	.0714	.1239	.1239	.1254		.1022		

DATE 23 SEP 74 TABULATED DATA LISTING FOR 04B (AEDC VAS32)

MACH (1) = 8.000 ALPHA (2) = 30.000 AEDC VAS32 04B 01 ORB. BOTTOM SURFACE WING (RTLLIS) WEP = 3.955 WEP = .049

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE MU/NO

21/5	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9860	.9930
Y/C	.0516	.0286		.3631	.2593	.3663	.0809		.1254	.1067	.0724	
.001					.3425		.1703					
.002					.3029		.1711					
.003					.3392		.1810					
.004					.2800		.1763					
.005					.2936		.1694					
.006					.2381		.1696					
.007							.4163					
.008				.1545	.3501				.1264			
.009				.1444		.1653	.3754	.2769	.1342			
.010												
.015					.1024							
.017				.1040		.1362						
.020												
.023					.1126	.1181	.3693	.3013	.2360			
.025				.0248			.1402					
.026						.1294						
.044				.2444			.2146	.3714	.1901			
.047												
.059				.1184								
.0816				.1686	.1020		.1563	.1599	.1587			
.082				.1660	.1032	.1777	.1563					
.083						.1181	.1569					
.084						.1546	.1070					
.085				.1323	.1287	.1359	.1543		.1436			
.092												
MACH (1) = 8.000 ALPHA (3) = 35.000				.35.000			.97.667	.01 = 3.955	WEP = .049			

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE MU/NO

21/5	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9860	.9930
Y/C	.0934	.1214		.3515	.3226	.2496	.0723		.17	.1305	.0967	
.001					.4295		.1843					
.002					.4307		.2080					
.003					.4499		.2191					
.004					.3950		.2407					
.005					.3749		.2247					
.006					.3200		.2334					
.007							.2778					
.025				.1561	.3434							

(RTKL15)

MACH (1) = 0.000 ALPHA (3) = 35.000

SECTION (1) BOTTOM SURF. WING

DEPENDENT VARIABLE HU/HO

XY/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9930
X/C											
.080				.1755		.2318	.2277	.4012		.1717	
.100										.1840	
.153	.0986				.1408	.1801					
.177				.1920							
.200											
.299	.0749										
.300					.1654	.1483	.4081	.4131	.2926		
.302				.1683			.1672				
.428						.1973					
.444	.1078				.3058		.1590	.3623	.2556		
.487											
.500				.2839							
.559											
.590	.2002										
.605				.2340	.1747			.1646			
.700				.2384	.2263	.2010	.1040		.1921		
.736	.3087										
.800						.1398	.1611				
.850						.1797	.2169				
.900	.1072			.1687	.1974	.1379	.1132		.1646		



DATE 23 SEP 74

TABULATED DATA LISTING FOR OH4B (AEDC VA352)

PAGE 283

AEDC VA352 OH4B 01 ORG. BOTTOM SURFACE WING (RTKL17) (25 APR 74)

REFERENCE DATA

REF = .8238 SQ.FT. XMRP = .0000 IN.
 REF = 22.5803 IN. YMRP = .0000 IN.
 REF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
 S.FLAP = 10.000 ELEVON = 3.000
 HAW/MT = 1.000

WACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.700 CI = 3.949 HREF = .049

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE MU/40

Z/Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0518	.0301		.3669	.2593	.3663	.0817		.1231	.1080	.0907
.002					.3426	.3046	.1712					
.003					.3046	.3369	.1624					
.004					.2795	.1797						
.005					.2937	.1892						
.006					.2398	.1879						
.007												
.025	.0464		.1498	.3522		.4201						
.050		.1477		.1634	.3774	.2734			.1248	.1307		
.100	.0879											
.177			.1031	.1022		.1342						
.200	.0619				.1123	.1201	.3660	.2990	.2390			
.299			.0968			.1251						
.300					.1329							
.302												
.303												
.429												
.444	.0806				.2536							
.500						.1329						
.559		.1554			.2219	.3736			.1906			
.590	.0906											
.600					.1813	.1081			.1567			
.700		.1740	.2026	.1775	.1937					.1990		
.736	.2115											
.800					.1718	.2203						
.850					.2221	.2579						
.900	.1174	.1904	.1919	.1979	.2191					.1850		

AEDC VA352 OH-8 Q1 ORB. BOTTOM SURFACE WING (RTKL17)

MACH (1) = 8.000 ALPHA (2) = 35.000 T1 = 97.700 Q1 = 3.949 HREF = .049

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE MU/MD

2 Y/B .2570 .3010 .3480 .4000 .5000 .6000 .7500 .8500 .9000 .9500 .9860 .9930

X/C

.001	.0554	.0308	.3319	.3207	.2809	.0742	.1617	.1261	.1150
.002			.4288	.4288		.1831			
.003			.4299	.4299		.2073			
.004			.4467	.4467		.2175			
.005			.3993	.3993		.2408			
.006			.3778	.3778		.2237			
.007			.3204	.3204		.2303			
.025	.0478		.1558	.3474	.2778				
.050						.1738			
.100		.1745	.2336	.2336	.2214	.3975	.1854		
.153	.1003								
.177		.1419		.1770					
.200		.1342							
.299	.0753		.1667	.1485	.2588	.4121	.2991		
.300		.1718							
.302									
.303					.1378				
.428				.2025					
.444	.1077		.3123		.1819	.1733	.2649		
.487		.2871							
.500									
.559									
.590	.2064		.2358	.1732		.1349	.2612		
.600		.2359	.2284	.2015	.0881				
.700									
.756	.3046								
.800				.1863	.1084				
.850				.2413	.1533				
.900	.1351	.2244	.2086	.2204	.1415				.1932



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMAB (AEDC VA352)

PAGE 283

AEDC VA352 OMAB 01 ORB. BOTTOM SURFACE WING (RTKL18) (25 APR 74)

REFERENCE DATA

STEP = .0236 SQ.FT. XMRP = .0000 IN.
 LREF = 22.9803 IN. YMRP = .0000 IN.
 BREF = 18.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 IN/L = 3.720
 B.FLAP = 10.000 ELEVON = 5.000
 HAW/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.200 QI = 3.933 HREF = .049

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

21/3	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9600	.9930
X/C	.001	.0663	.0349	.4240	.2688	.3761	.0801	.1935	.1393	.0642		
.002				.3482	.2186							
.003				.3480	.2021							
.004				.3404	.1793							
.006				.3011	.1515							
.008				.2751	.1238							
.007				.2238	.1118							
.025	.0585		.1906	.3693		.3671				.1792		
.050			.1589		.1638	.1815	.1992			.1818		
.100	.1106											
.150				.1273								
.177			.1097		.1167							
.200	.0724											
.293			.0982	.1118	.0880		.1016	.1113	.1192			
.300						.2188						
.302												
.303						.0594						
.428	.0662											
.444				.1137			.3137	.1253	.0929			
.467												
.500			.1143									
.553	.0757											
.590				.1139	.0811				.0900			
.600			.1289	.1179	.0869	.1519				.0756		
.700												
.736	.1614											
.800				.0872	.2491							
.850				.1092	.2631							
.900	.1470		.1790	.1778	.1192	.2287				.1639		

DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA352)

PAGE 286

AEDC VA352 OMB 01 OMB, BOTTOM SURFACE WING (RTKL18)

MACH (1) = 0.000 ALPHA (2) = 35.000 γ = 97.200 α = 3.933 HREF = .049

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE MU/HO

21/8	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9650	.9930
X/C												
.001		.0882	.0413		.3734	.2746	.2700	.0802		.1604	.1372	.1078
.002					.3691	.3691		.1743				
.003					.3705	.3705		.1916				
.004					.3976	.3976		.2108				
.005					.3583	.3583		.2235				
.006					.3492	.3492		.2328				
.007					.3017	.3017		.2376				
.025	.0877			.1633	.3705		.2911					
.050									.1719			
.100				.1739	.2360	.2398	.3622		.1843			
.153	.1202											
.177					.1227							
.200				.1240		.1826						
.299	.0795											
.300					.1220	.1411		.4129	.3623	.2549		
.302				.1086			.1682					
.303						.1632						
.428												
.444	.0782											
.487					.2436							
.500				.1300			.1668	.2658		.2309		
.559	.1008											
.600					.2176	.1534			.1654			
.700	.1923			.1474	.2077	.1729	.0871			.2259		
.736						.1593	.1031					
.800					.2137	.2137	.1467					
.850						.1970	.1308					
.900	.1364			.1745	.2033	.1970	.1308			.2155		



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA352)

PAGE 287

AEDC VA352 OMB 01 OMB. BOTTOM SURFACE WING (RTKL19) (25 APR 74)

REFERENCE DATA

STEP = .0238 SQ.FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. YMRP = .0000 IN.
 SREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -6.000 RN/L = 2.000
 B.FLAP = 10.000 ELEVON = 5.000
 HAWAHT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 YI = 99.850 QI = 1.983 WREF = .035

SECTION (1) BOTTOM SURF. WING

DEPENDENT VARIABLE HU/NO

X/Y S 2500 .3010 .3480 .4000 .5000 .6000 .7500 .8500 .9000 .9500 .9850 .9930

X/C

.001	.0759	.0383	.4339	.2799	.3577	.0795	.1614	.1146	.0850
.002			.3640	.1999					
.003			.3754	.1889					
.004			.3404	.1699					
.005			.3087	.1491					
.006			.2594	.1204					
.007			.2202	.1098					
.008			.2074	.4109	.3631				
.009			.1638	.1732	.1814	.1996	.1543	.1550	
.010	.1153								
.011			.1217						
.012	.0764	.1071	.1164						
.013		.0876	.1116	.0822	.1036	.1194	.1271		
.014				.2747					
.015	.0871		.0946						
.016			.0987						
.017			.1752	.1695			.0980		
.018	.0509	.0728							
.019		.0722	.0776	.0799		.0482	.0581		
.020	.0825	.0872	.0930	.0932					
.021			.0363	.0325					
.022			.0650	.0746					
.023			.0585	.0625					
.024	.0942	.0577	.0532	.0585	.0625		.0718		

AEDC VA352 OMB Q1 OMB. BOTTOM SURFACE WING (RTKL18)

MACH (1) = 8.000 ALPHA (2) = 35.000 T1 = 95.650 Q1 = 1.983 HREF = .035

SECTION (1) BOTTOM SURF. WING

DEPENDENT VARIABLE MU/NO

27/8 .2500 .3010 .3480 .4000 .5000 .6000 .7500 .8500 .9000 .9500 .9660 .9930

X/C

.001	.0708	.0417	.3888	.2626	.2046	.0717	.1351	.1074	.0860
.002			.3326	.3326	.1618	.1618			
.003			.3549	.3549	.1635	.1635			
.004			.3469	.3469	.1578	.1578			
.006			.3173	.3173	.1483	.1483			
.008			.2928	.2928	.1278	.1278			
.007			.2438	.2438	.1207	.1207			
.025	.0667		.1848	.3770	.2975				
.050			.1659	.1822	.1837	.2079	.1353		
.100	.1233						.1373		
.153			.1154	.1204	.1189				
.177									
.200									
.259	.0609		.1099	.0919	.2792	.1605	.1353		
.300					.1074				
.302			.0989						
.303				.1004					
.428									
.444	.0688		.1080		.0968	.2916	.1464		
.467			.0746						
.500									
.559									
.590	.0524			.0918	.0864	.1172			
.600			.0747	.0762	.0660	.0477	.1647		
.700									
.736	.0701								
.800				.0374	.0390				
.850				.0713	.0721				
.900	.1238		.0833	.0680	.0684	.0675	.1541		



(RTKL20) (25 APR 74)

REFERENCE DATA

REF =	.0238 SQ.FT.	YHP =	.0000 IN.
LEV =	22.5803 IN.	YHP =	.0000 IN.
DEF =	16.3919 IN.	ZHP =	.0000 IN.
SCALE =	.0175 SCALE		

MACH (1) =	0.000	ALPHA (1) =	30.000	TI	=	99,900	QI	=	1.980	WZF	=	.035
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SECTION (1) BOTTOM SURF. WING	DEPENDENT VARIABLE HUAD
1	1
2	2
3	3
4	4
5	5
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9	9
10	10
11	11
12	12
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90	90
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92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

217A	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9600	.9930
K/C											
.001		.0628	.0294		.3741	.2469	.2671	.0743	.1233	.0891	.0632
.002					.3322			.1618			
.003					.3082			.1573			
.004					.3245			.1508			
.005					.2739			.1404			
.07A					.2814			.1289			
.007					.2268			.1223			
.025	.0439			.1583	.3507		.2324				
.050									.1212		
.100				.1417		.1583	.1990	.1959	.1228		
.153	.0929										
.177					.0975						
.200				.0960		.1154					
.299	.0861										
.300					.0947	.0992		.2679	.1716	.1328	
.302				.0808			.1029				
.303						.1005					
.426											
.0642					.0911		.0862	.2746	.1371		
.467				.0637							
.500											
.539	.0416										
.590					.0732	.0842			.1250		
.600				.0626	.0676	.0464	.0427		.1675		
.700											
.736	.0592										
.800						.0289	.0391				
.850						.0874	.0842				
.900	.0941			.0533	.0692	.0533	.0601				.1474

AEDC VA352 Q4B Q1 Q08, BOTTOM SURFACE WING (RTKL20)

MACH (1) = 8.000 ALPHA (2) = 35.000 T1 = 95.900 Q1 = 1.980 HREF = .035

SECTION (1) BOTTOM SURF. WING

DEPENDENT VARIABLE MU/HQ

2 Y/A .2500 .3010 .3480 .4000 .5000 .6000 .7500 .8500 .9000 .9500 .9680 .9930

X/C

.001	.0864	.0302	.3404	.3103	.2448	.0893	.1283	.1117	.1043
.002			.4246	.4246	.1359				
.003			.4071	.4071	.1453				
.004				.1258	.1363				
.005				.3692	.1413				
.006				.3436	.1220				
.007				.2814	.1222				
.025	.0492		.1474	.3220	.2610				
.050									
.100			.1474	.1873	.1612	.2294	.1386		
.153	.1016						.1528		
.177									
.200			.1030	.0982	.1351				
.299	.0735								
.300			.0887	.0945	.1034	.1505	.3137	.2437	
.302									
.303					.1266				
.428									
.444	.0821								
.487				.1161					
.500			.0744		.0960	.0991	.2108		
.559	.0845								
.600				.0798	.0878		.0839		
.700			.0735	.0705	.0965	.0803		.1775	
.736	.0837								
.800					.0338	.0436			
.850				.0674	.0770				
.900	.1192		.0727	.0773	.0653	.0705		.1112	

DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VAS32)

PAGE 291

AEDC VAS32 OMB 01 ORB. BOTTOM SURFACE WING (RTKL21) (25 APR 74)

REFERENCE DATA

REF = .0238 SQ.FT. WING = .0000 IN.
 REF = 22.5603 IN. WING = .0000 IN.
 REF = 16.3919 IN. WING = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -9.000 IN/L = .900
 S.F.LAP = 10.000 ELEVON = 9.000
 HAWAHT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 Y1 = 91.990 Q1 = .518 HREF = .017

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE MU/RO

Y1/2	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0785	.0403		.4849	.2944	.3662	.0822		.1642	.1198	.0814
.002						.3750		.2037				
.003						.3609		.1942				
.004						.3491		.1739				
.005						.3180		.1528				
.006						.2650		.1264				
.007						.2231		.1164				
.008	.0890			.2235	.4285		.3735					
.009				.1674		.1777	.1757	.2018		.1617		
.010	.1159									.1633		
.011				.1105	.1289		.1159					
.012	.0736											
.013				.0927	.1142	.0766		.1024	.1225	.1360		
.014							.0632					
.015	.0879				.1029	.0968						
.016												
.017		.0773					.0907	.1049		.1048		
.018	.0840				.0823	.0796						
.019				.0718	.0695	.0668	.0425		.0472			
.020	.0800									.0707		
.021						.0441	.0360					
.022	.0800					.0647	.0666					
.023				.0666	.0622	.0578	.0361					
.024	.0617									.0702		

AEDC VAS32 04-18 01 ORG. BOTTOM SURFACE WING (RTL21)

WACH (1) =	8.000	ALPHA (2) =	39.000	TL =	91.950	Q1 =	.516	WEP =	.017
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2014. 2015. 2016. 2017. 2018. 2019. 2020. 2021. 2022. 2023. 2024. 2025. 2026. 2027. 2028. 2029. 2030. 2031. 2032. 2033. 2034. 2035. 2036. 2037. 2038. 2039. 2040. 2041. 2042. 2043. 2044. 2045. 2046. 2047. 2048. 2049. 2050. 2051. 2052. 2053. 2054. 2055. 2056. 2057. 2058. 2059. 2060. 2061. 2062. 2063. 2064. 2065. 2066. 2067. 2068. 2069. 2070. 2071. 2072. 2073. 2074. 2075. 2076. 2077. 2078. 2079. 2080. 2081. 2082. 2083. 2084. 2085. 2086. 2087. 2088. 2089. 2090. 2091. 2092. 2093. 2094. 2095. 2096. 2097. 2098. 2099. 2100. 2101. 2102. 2103. 2104. 2105. 2106. 2107. 2108. 2109. 2110. 2111. 2112. 2113. 2114. 2115. 2116. 2117. 2118. 2119. 2120. 2121. 2122. 2123. 2124. 2125. 2126. 2127. 2128. 2129. 2130. 2131. 2132. 2133. 2134. 2135. 2136. 2137. 2138. 2139. 2140. 2141. 2142. 2143. 2144. 2145. 2146. 2147. 2148. 2149. 2150. 2151. 2152. 2153. 2154. 2155. 2156. 2157. 2158. 2159. 2160. 2161. 2162. 2163. 2164. 2165. 2166. 2167. 2168. 2169. 2170. 2171. 2172. 2173. 2174. 2175. 2176. 2177. 2178. 2179. 2180. 2181. 2182. 2183. 2184. 2185. 2186. 2187. 2188. 2189. 2190. 2191. 2192. 2193. 2194. 2195. 2196. 2197. 2198. 2199. 2200. 2201. 2202. 2203. 2204. 2205. 2206. 2207. 2208. 2209. 2210. 2211. 2212. 2213. 2214. 2215. 2216. 2217. 2218. 2219. 2220. 2221. 2222. 2223. 2224. 2225. 2226. 2227. 2228. 2229. 2230. 2231. 2232. 2233. 2234. 2235. 2236. 2237. 2238. 2239. 2240. 2241. 2242. 2243. 2244. 2245. 2246. 2247. 2248. 2249. 2250. 2251. 2252. 2253. 2254. 2255. 2256. 2257. 2258. 2259. 2260. 2261. 2262. 2263. 2264. 2265. 2266. 2267. 2268. 2269. 2270. 2271. 2272. 2273. 2274. 2275. 2276. 2277. 2278. 2279. 2280. 2281. 2282. 2283. 2284. 2285. 2286. 2287. 2288. 2289. 2290. 2291. 2292. 2293. 2294. 2295. 2296. 2297. 2298. 2299. 2300. 2301. 2302. 2303. 2304. 2305. 2306. 2307. 2308. 2309. 2310. 2311. 2312. 2313. 2314. 2315. 2316. 2317. 2318. 2319. 2320. 2321. 2322. 2323. 2324. 2325. 2326. 2327. 2328. 2329. 2330. 2331. 2332. 2333. 2334. 2335. 2336. 2337. 2338. 2339. 2340. 2341. 2342. 2343. 2344. 2345. 2346. 2347. 2348. 2349. 2350. 2351. 2352. 2353. 2354. 2355. 2356. 2357. 2358. 2359. 2360. 2361. 2362. 2363. 2364. 2365. 2366. 2367. 2368. 2369. 2370. 2371. 2372. 2373. 2374. 2375. 2376. 2377. 2378. 2379. 2380. 2381. 2382. 2383. 2384. 2385. 2386. 2387. 2388. 2389. 2390. 2391. 2392. 2393. 2394. 2395. 2396. 2397. 2398. 2399. 2400. 2401. 2402. 2403. 2404. 2405. 2406. 2407. 2408. 2409. 2410. 2411. 2412. 2413. 2414. 2415. 2416. 2417. 2418. 2419. 2420. 2421. 2422. 2423. 2424. 2425. 2426. 2427. 2428. 2429. 2430. 2431. 2432. 2433. 2434. 2435. 2436. 2437. 2438. 2439. 2440. 2441. 2442. 2443. 2444. 2445. 2446. 2447. 2448. 2449. 2450. 2451. 2452. 2453. 2454. 2455. 2456. 2457. 2458. 2459. 2460. 2461. 2462. 2463. 2464. 2465. 2466. 2467. 2468. 2469. 2470. 2471. 2472. 2473. 2474. 2475. 2476. 2477. 2478. 2479. 2480. 2481. 2482. 2483. 2484. 2485. 2486. 2487. 2488. 2489. 2490. 2491. 2492. 2493. 2494. 2495. 2496. 2497. 2498. 2499. 2500. 2501. 2502. 2503. 2504. 2505. 2506. 2507. 2508. 2509. 2510. 2511. 2512. 2513. 2514. 2515. 2516. 2517. 2518. 2519. 2520. 2521. 2522. 2523. 2524. 2525. 2526. 2527. 2528. 2529. 2530. 2531. 2532. 2533. 2534. 2535. 2536. 2537. 2538. 2539. 2540. 2541. 2542. 2543. 2544. 2545. 2546. 2547. 2548. 2549. 2550. 2551. 2552. 2553. 2554. 2555. 2556. 2557. 2558. 2559. 2560. 2561. 2562. 2563. 2564. 2565. 2566. 2567. 2568. 2569. 2570. 2571. 2572. 2573. 2574. 2575. 2576. 2577. 2578. 2579. 2580. 2581. 2582. 2583. 2584. 2585. 2586. 2587. 2588. 2589. 2590. 2591. 2592. 2593. 2594. 2595. 2596. 2597. 2598. 2599. 2600. 2601. 2602. 2603. 2604. 2605. 2606. 2607. 2608. 2609. 2610. 2611. 2612. 2613. 2614. 2615. 2616. 2617. 2618. 2619. 2620. 2621. 2622. 2623. 2624. 2625. 2626. 2627. 2628. 2629. 2630. 2631. 2632. 2633. 2634. 2635. 2636. 2637. 2638. 2639. 2640. 2641. 2642. 2643. 2644. 2645. 2646. 2647. 2648. 2649. 2650. 2651. 2652. 2653. 2654. 2655. 2656. 2657. 2658. 2659. 2660. 2661. 2662. 2663. 2664. 2665. 2666. 2667. 2668. 2669. 2670. 2671. 2672. 2673. 2674. 2675. 2676. 2677. 2678. 2679. 2680. 2681. 2682. 2683. 2684. 2685. 2686. 2687. 2688. 2689. 2690. 2691. 2692. 2693. 2694. 2695. 26

DEPENDENT VARIABLE MU-50

| 27A | .2500 | .3010 | .3460 | .4000 | .5000 | .6000 | .7500 | .8500 | .9000 | .9500 | .9930 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1/C | | | | | | | | | | | |
| .001 | | .0793 | .0413 | | .4012 | .2709 | .2980 | .0736 | | | |
| .002 | | | | | | .3466 | | .1679 | .1407 | .1110 | .0880 |
| .003 | | | | | | .3659 | | .1680 | | | |
| .004 | | | | | | .3553 | | .1608 | | | |
| .005 | | | | | | .3286 | | .1523 | | | |
| .006 | | | | | | .3025 | | .1316 | | | |
| .007 | | | | | | | | .1207 | | | |
| .025 | .0866 | | | .2000 | .3663 | | .3151 | | | | |
| .050 | | | | | | | | | .1426 | | |
| .100 | | | .1724 | | | .1679 | .1697 | .2166 | .1462 | | |
| .153 | .1254 | | | | .1294 | | | | | | |
| .177 | | | | .1208 | | .1271 | | | | | |
| .200 | .0635 | | | | | | | | | | |
| .250 | | | | | .1142 | .0866 | | .0956 | .1369 | .1316 | |
| .302 | | | | .1017 | | | | | | | |
| .303 | | | | | | | .1120 | | | | |
| .428 | | | | | | .1085 | | | | | |
| .444 | .0756 | | | | | | | | | | |
| .467 | | | | | .1116 | | | | | | |
| .500 | | | | | | | | | | | |
| .559 | | | .0607 | | | | .1023 | .0980 | .0996 | | |
| .600 | .0812 | | | | | .0679 | | | | | |
| .700 | | .0764 | | | .0942 | .0814 | .0479 | | .0413 | | |
| .736 | .0691 | | | | .0766 | | | | | .0659 | |
| .800 | | | | | | .0433 | .0474 | | | | |
| .880 | | | | | | .0719 | .0763 | | | | |
| .900 | .0863 | | .0822 | .0890 | .0893 | .0893 | .0637 | | | | .0673 |

AEDC VA332 OMB 01 OMB, BOTTOM SURFACE WING (RTM22) (25 APR 74)

REFERENCE DATA

| | | | | | | | |
|-------|---|---------|-------|------|---|-------|-----|
| 9828 | = | .0230 | 90.47 | 1449 | = | .0000 | IN. |
| -187 | = | 22.9033 | IN. | 1449 | = | .0000 | IN. |
| 9828 | = | 16.3918 | IN. | 2449 | = | .0000 | IN. |
| SCALE | = | .077 | SCALE | | | | |

PARAMETRIC DATA

| | | | |
|-----------|--------|----------|-------|
| BETA = | .000 | W/L = | .500 |
| B.F.LAP = | 10.000 | ELEVON = | 5.000 |
| HAW/HT = | 1.000 | | |

| | | | | | | | | | |
|----------------------|---------|----------------------|----------|--------------|----------|---------|--------|----------------|--------|
| $\text{ALPHA} (1) =$ | 6.000 | $\text{ALPHA} (1) =$ | 30.000 | $\gamma_1 =$ | 93.400 | $Q_1 =$ | $.523$ | $\text{MFP} =$ | $.010$ |
|----------------------|---------|----------------------|----------|--------------|----------|---------|--------|----------------|--------|

| SECTION (1) SECTION 200.00 | DEPENDENT VARIABLE MUAMO |
|----------------------------|--------------------------|
| 1.00 | 1.00 |
| 2.00 | 2.00 |
| 3.00 | 3.00 |
| 4.00 | 4.00 |
| 5.00 | 5.00 |
| 6.00 | 6.00 |
| 7.00 | 7.00 |
| 8.00 | 8.00 |
| 9.00 | 9.00 |
| 10.00 | 10.00 |
| 11.00 | 11.00 |
| 12.00 | 12.00 |
| 13.00 | 13.00 |
| 14.00 | 14.00 |
| 15.00 | 15.00 |
| 16.00 | 16.00 |
| 17.00 | 17.00 |
| 18.00 | 18.00 |
| 19.00 | 19.00 |
| 20.00 | 20.00 |
| 21.00 | 21.00 |
| 22.00 | 22.00 |
| 23.00 | 23.00 |
| 24.00 | 24.00 |
| 25.00 | 25.00 |
| 26.00 | 26.00 |
| 27.00 | 27.00 |
| 28.00 | 28.00 |
| 29.00 | 29.00 |
| 30.00 | 30.00 |
| 31.00 | 31.00 |
| 32.00 | 32.00 |
| 33.00 | 33.00 |
| 34.00 | 34.00 |
| 35.00 | 35.00 |
| 36.00 | 36.00 |
| 37.00 | 37.00 |
| 38.00 | 38.00 |
| 39.00 | 39.00 |
| 40.00 | 40.00 |
| 41.00 | 41.00 |
| 42.00 | 42.00 |
| 43.00 | 43.00 |
| 44.00 | 44.00 |
| 45.00 | 45.00 |
| 46.00 | 46.00 |
| 47.00 | 47.00 |
| 48.00 | 48.00 |
| 49.00 | 49.00 |
| 50.00 | 50.00 |
| 51.00 | 51.00 |
| 52.00 | 52.00 |
| 53.00 | 53.00 |
| 54.00 | 54.00 |
| 55.00 | 55.00 |
| 56.00 | 56.00 |
| 57.00 | 57.00 |
| 58.00 | 58.00 |
| 59.00 | 59.00 |
| 60.00 | 60.00 |
| 61.00 | 61.00 |
| 62.00 | 62.00 |
| 63.00 | 63.00 |
| 64.00 | 64.00 |
| 65.00 | 65.00 |
| 66.00 | 66.00 |
| 67.00 | 67.00 |
| 68.00 | 68.00 |
| 69.00 | 69.00 |
| 70.00 | 70.00 |
| 71.00 | 71.00 |
| 72.00 | 72.00 |
| 73.00 | 73.00 |
| 74.00 | 74.00 |
| 75.00 | 75.00 |
| 76.00 | 76.00 |
| 77.00 | 77.00 |
| 78.00 | 78.00 |
| 79.00 | 79.00 |
| 80.00 | 80.00 |
| 81.00 | 81.00 |
| 82.00 | 82.00 |
| 83.00 | 83.00 |
| 84.00 | 84.00 |
| 85.00 | 85.00 |
| 86.00 | 86.00 |
| 87.00 | 87.00 |
| 88.00 | 88.00 |
| 89.00 | 89.00 |
| 90.00 | 90.00 |
| 91.00 | 91.00 |
| 92.00 | 92.00 |
| 93.00 | 93.00 |
| 94.00 | 94.00 |
| 95.00 | 95.00 |
| 96.00 | 96.00 |
| 97.00 | 97.00 |
| 98.00 | 98.00 |
| 99.00 | 99.00 |
| 100.00 | 100.00 |

[illegible][illegible]

AEDC VA332 OMB 01 ORB. BOTTOM SURFACE WING (RTKL22)

WING (1) = 8.000 ALPHA (2) = 35.000 T1 = 93.400 Q1 = .923 WREF = .018

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE HU/40

| Z/H | .2500 | .3000 | .3480 | .4000 | .5000 | .6000 | .7000 | .8000 | .9000 | .9500 | .9800 | .9900 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.01 | | .0818 | .0808 | | .3470 | .3180 | .2834 | .0833 | | .1088 | .0778 | .0452 |
| 1.02 | | | | | .4360 | .4260 | .4119 | .1427 | | | | |
| 1.03 | | | | | | .4332 | .4338 | .1338 | | | | |
| 1.04 | | | | | | .3717 | .3317 | .1168 | | | | |
| 1.05 | | | | | | .3495 | .3168 | .1052 | | | | |
| 1.06 | | | | | | .2480 | .2813 | | | | | |
| 1.07 | .0000 | | | .1336 | .3362 | | | | | | | |
| 1.08 | | | | .1503 | | .1566 | .1690 | .1848 | | .1104 | | |
| 1.09 | .1083 | | | | | | | | | .1108 | | |
| 1.10 | | | | .1037 | .1048 | .1365 | | | | | | |
| 1.11 | .0770 | | | | .0987 | .0963 | .1135 | .1215 | .1092 | | | |
| 1.12 | | | | .0856 | | | .1092 | | | | | |
| 1.13 | | | | | .1191 | | | | | | | |
| 1.14 | .0887 | | | | .1194 | | .1019 | .1028 | .0895 | | | |
| 1.15 | | | | .0708 | | | | | | | | |
| 1.16 | .0538 | | | | .0774 | .0862 | | .0801 | | | | |
| 1.17 | | | | .0843 | .0843 | .0827 | .0463 | | | .0710 | | |
| 1.18 | .0598 | | | | | .0394 | .0502 | | | | | |
| 1.19 | | | | | | .0641 | .0760 | | | | | |
| 1.20 | .0484 | | | .0819 | .0894 | .0608 | .0712 | | | .0712 | | |



AEDC VA352 OH-1B Q1 ORG. BOTTOM SURFACE WING (RTK(23)

MACH (1) = 6.000 ALPHA (2) = 30.000 TI = 93.433 Q1 = .521 HREF = .018

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2 Y/B .2500 .3010 .3480 .4000 .5000 .6000 .7500 .8500 .9000 .9500 .9800 .9930

X/C

| | | | | | | | | | | | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| .001 | .0588 | .0301 | .1629 | .3561 | .3911 | .2597 | .2884 | .0726 | .1273 | .0034 | .0263 |
| .002 | | | | | | .2857 | | .1634 | | | |
| .003 | | | | | | .3196 | | .1612 | | | |
| .004 | | | | | | .3439 | | .1497 | | | |
| .005 | | | | | | .2889 | | .1393 | | | |
| .006 | | | | | | .2926 | | .1149 | | | |
| .007 | | | | | | .2354 | | .1047 | | | |
| .025 | | | | | | | .2976 | | | | |
| .550 | | | | | | | | | .1274 | | |
| .100 | | | | | | .1441 | .1603 | .1700 | .1868 | .1275 | |
| .153 | | | | | | | | | | | |
| .177 | | | | | | .1026 | | | | | |
| .200 | | | | | | | .1187 | | | | |
| .299 | | | | | | .0962 | | | | | |
| .300 | | | | | | .0983 | .0910 | .0874 | .1150 | .1200 | |
| .302 | | | | | | .0811 | | | | | |
| .303 | | | | | | | | .0990 | | | |
| .428 | | | | | | | .1037 | | | | |
| .444 | | | | | | | | | | | |
| .487 | | | | | | .1026 | | | | | |
| .500 | | | | | | .0648 | | .0685 | .0933 | .0759 | |
| .559 | | | | | | | | | | | |
| .590 | | | | | | .0477 | | | | | |
| .600 | | | | | | .0732 | .0662 | | .0442 | | |
| .700 | | | | | | .0627 | .0647 | .0618 | .0421 | .0412 | |
| .736 | | | | | | .0468 | | | | | |
| .800 | | | | | | | .0334 | .0638 | | | |
| .850 | | | | | | | .0771 | .0937 | | | |
| .900 | | | | | | .0752 | .0664 | .0685 | .0746 | .0691 | |

MACH (1) = 6.000 ALPHA (3) = 35.000 TI = 93.433 Q1 = .521 HREF = .018

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2 Y/B .2500 .3010 .3480 .4000 .5000 .6000 .7500 .8500 .9000 .9500 .9800 .9930

X/C

| | | | | | | | | | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| .001 | .0817 | .0303 | .3491 | .3144 | .2872 | .0648 | .1121 | .0761 | .0351 |
| .002 | | | | .4375 | | .1441 | | | |
| .003 | | | | .4191 | | .1426 | | | |
| .004 | | | | .4346 | | .1387 | | | |
| .005 | | | | .3743 | | .1299 | | | |
| .006 | | | | .3434 | | .1168 | | | |
| .007 | | | | .2856 | | .1071 | | | |
| .025 | | | | .3341 | .2820 | | | | |

DATE 23 SEP 74

TABULATED DATA LISTING FOR OH4B (AEDC VA352)

PAGE 297

(RTKL23)

MACH (1) = 0.000 ALPHA (3) = 35.000

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

| 21/8 | .2500 | .3010 | .3480 | .4000 | .5000 | .6000 | .7500 | .8500 | .9000 | .9500 | .9960 | .9930 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| X/C | | | | | | | | | | | | |
| .080 | | | | .1489 | | .1961 | .1862 | .1611 | | .1121 | | |
| .100 | | | | | | | | | | .1116 | | |
| .123 | .1057 | | | | | | | | | | | |
| .177 | | | | .1031 | .1084 | .1371 | | | | | | |
| .200 | | | | | | | | | | | | |
| .299 | .0736 | | | | | | | | | | | |
| .300 | | | | | .0948 | .0964 | .1090 | .1208 | .1142 | | | |
| .302 | | | | .0868 | | | | | | | | |
| .303 | | | | | | | .1112 | | | | | |
| .428 | | | | | .1208 | | | | | | | |
| .444 | .0874 | | | | | | | | | | | |
| .487 | | | | | .1195 | | .1034 | .1066 | .0918 | | | |
| .500 | | | | .0707 | | | | | | | | |
| .559 | | | | | | | | | | | | |
| .590 | .0547 | | | | | | | | | | | |
| .600 | | | | | .0766 | .0669 | | | .0519 | .0519 | | |
| .700 | | | | .0647 | .0552 | .0564 | .0480 | | | | | |
| .736 | .0591 | | | | | | | | | | | |
| .800 | | | | | .0307 | .0561 | | | | | | |
| .850 | | | | | .0785 | .1022 | | | | | | |
| .900 | | | | .0662 | .0676 | .0767 | .1018 | | | .0873 | | |

DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-6B (AEDC VAS32)

PAGE 298

AEDC VAS32 OH-6B G1 ORG. BOTTOM SURFACE WING. (RTKL24) (25 APR 74)

REFERENCE DATA

STEP = .9238 SQ.FT. XMRP = .0000 IN.
 LREF = 22.9903 IN. XMRP = .0000 IN.
 STEP = 16.3919 IN. XMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -8.000 RV/L = .900
 S.FLAP = 10.000 ELEVON = 10.000
 HAWK/HIT = 1.000

MACH (1) = 8.000 ALPHA (1) = 25.000 T1 = 93.233 Q1 = .523 STEP = .016
 SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE MU/HO

| 2 Y/3 | .2500 | .3010 | .3480 | .4000 | .5000 | .6000 | .7500 | .8500 | .9000 | .9500 | .9860 | .9930 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| X/C | | | | | | | | | | | | |
| .001 | | .0750 | .0453 | | .4603 | .3107 | .3623 | .0914 | | .1837 | .1324 | .0448 |
| .002 | | | | | .3780 | .3080 | | .2080 | | | | |
| .003 | | | | | .3622 | .1900 | | .1678 | | | | |
| .004 | | | | | .3279 | .1678 | | .1478 | | | | |
| .006 | | | | | .2962 | .1478 | | .1170 | | | | |
| .008 | | | | | .2588 | .1170 | | .1043 | | | | |
| .007 | | | | | .2141 | .0631 | | | | | | |
| .025 | .0632 | | | .2369 | .4001 | | | | | .1725 | | |
| .050 | | | .1596 | | .1563 | .1869 | .1878 | | | .1699 | | |
| .100 | .1008 | | | | | | | | | | | |
| .153 | | | | | | | | | | | | |
| .177 | | | | | | | | | | | | |
| .200 | .0671 | | | .0983 | .1071 | .1096 | | | | | | |
| .299 | | | | | | | | | | | | |
| .300 | | | | .0799 | .1007 | .0885 | .0972 | .1025 | .1116 | | | |
| .302 | | | | | | | | | | | | |
| .303 | | | | | | | .0903 | | | | | |
| .426 | | | | | | .0885 | | | | | | |
| .444 | .0594 | | | | | | | | | | | |
| .487 | | | | | | | | | | | | |
| .500 | | | | | .0671 | | .0601 | .0870 | .0857 | | | |
| .519 | | | | .0700 | | | | | | | | |
| .590 | .0463 | | | | | | | | | | | |
| .600 | | | | | | | | | | | | |
| .700 | | | | .0670 | .0604 | .0649 | .0299 | .0480 | .0450 | | | |
| .736 | .0609 | | | | | | | | | | | |
| .800 | | | | | .0408 | .0632 | | | | | | |
| .850 | | | | | .0760 | .0788 | | | | | | |
| .900 | .0727 | | | .0726 | .0677 | .0746 | .0693 | | | .0761 | | |



DATE 23 SEP 74

TABULATED DATA LISTING FOR OHB (AEDC VAS32)

PAGE 299

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.233 Q1 = .523 WEF = .018
 AEDC VAS32 OHB Q1 ORB. BOTTOM SURFACE WING (RTKL24)

SECTION (1) BOTTOM SURF. WING

DEPENDENT VARIABLE HU/HO

| 2Y/B | .2500 | .3010 | .3480 | .4000 | .5000 | .6000 | .7500 | .8500 | .9000 | .9500 | .9660 | .9930 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| X/C | | | | | | | | | | | | |
| .001 | | .0746 | .0410 | | .4599 | .2896 | .3633 | .0815 | | .1644 | .1161 | .0391 |
| .002 | | | | | | .3662 | | .2014 | | | | |
| .003 | | | | | | .3806 | | .1918 | | | | |
| .004 | | | | | | .3443 | | .1728 | | | | |
| .005 | | | | | | .3141 | | .1518 | | | | |
| .006 | | | | | | .2832 | | .1241 | | | | |
| .007 | | | | | | .2189 | | .1143 | | | | |
| .025 | .0870 | | | .2165 | .4186 | | .3678 | | | | | |
| .050 | | | | | | | | | | .1376 | | |
| .100 | | | | .1651 | | .1728 | .1787 | .2004 | | .1570 | | |
| .153 | .1102 | | | | | | | | | | | |
| .177 | | | | | .1261 | | | | | | | |
| .200 | | | | .1086 | | .1126 | | | | | | |
| .299 | .0756 | | | | .1116 | .0753 | | .1100 | .1246 | .1364 | | |
| .300 | | | | | | | | | | | | |
| .302 | | | | .0908 | | | .0811 | | | | | |
| .303 | | | | | | | | | | | | |
| .428 | | | | | | .0941 | | | | | | |
| .444 | .0703 | | | | .1029 | | | .0928 | .1082 | .1072 | | |
| .487 | | | | | | | | | | | | |
| .500 | | | | | | | | | | | | |
| .559 | | | | .0770 | | | | | | | | |
| .590 | .0852 | | | | .0812 | .0786 | | | .0499 | | | |
| .600 | | | | | .0687 | .0553 | .0423 | | | | | |
| .700 | | | | .0728 | | | | | | | | |
| .736 | .0596 | | | | | | | | | | | |
| .800 | | | | | | .0467 | .0407 | | | | | |
| .850 | | | | | | .0853 | .0892 | | | | | |
| .900 | .0933 | | | .0818 | .0734 | .0626 | .0601 | | | .0870 | | |

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.233 Q1 = .523 WEF = .018

SECTION (1) BOTTOM SURF. WING

DEPENDENT VARIABLE HU/HO

| 2Y/B | .2500 | .3010 | .3480 | .4000 | .5000 | .6000 | .7500 | .8500 | .9000 | .9500 | .9660 | .9930 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| X/C | | | | | | | | | | | | |
| .001 | | .0769 | .0396 | | .3985 | .2672 | .2940 | .0759 | | .1365 | .1096 | .0369 |
| .002 | | | | | | .3422 | | .1651 | | | | |
| .003 | | | | | | .3636 | | .1650 | | | | |
| .004 | | | | | | .3551 | | .1580 | | | | |
| .005 | | | | | | .3223 | | .1496 | | | | |
| .006 | | | | | | .2936 | | .1289 | | | | |
| .007 | | | | | | .2509 | | .1179 | | | | |
| .025 | .0662 | | | .1965 | .3910 | | .3064 | | | | | |

DATE 23 SEP 74

TABULATED DATA LISTING FOR OH4B (AEDC VA352)

PAGE 300

AEDC VA352 OH4B 01 ORB. BOTTOM SURFACE WING (RTKL24)

MACH (1) = 0.000 ALPHA (3) = 35.000

SECTION (1) BOTTOM SURF. WING

DEPENDENT VARIABLE HU/HO

| ZY/B | .2500 | .3010 | .3480 | .4000 | .5000 | .6000 | .7500 | .8500 | .9000 | .9500 | .9930 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| W/C | | | | | | | | | | | |
| .040 | | | | | | | | | | | |
| .100 | | | | .1701 | | .1871 | .1913 | .2109 | | .1397 | |
| .153 | .1256 | | | | | | | | | .1411 | |
| .177 | | | | | .1298 | | | | | | |
| .200 | | | | .1181 | | .1237 | | | | | |
| .253 | .0233 | | | | | | | | | | |
| .300 | | | | | .1110 | .0885 | | .0926 | .1353 | .1317 | |
| .322 | | | | .1008 | | | | | | | |
| .303 | | | | | | | .1089 | | | | |
| .428 | | | | | | .1029 | | | | | |
| .444 | .0769 | | | | | | | | | | |
| .487 | | | | | .1087 | | .1018 | .1024 | | .0931 | |
| .500 | | | | .0808 | | | | | | | |
| .553 | | | | | | | | | | | |
| .590 | .0697 | | | | .0929 | .0892 | | | .0433 | | |
| .650 | | | | .0742 | .0748 | .0374 | .0471 | | | .0392 | |
| .700 | | | | | | | | | | | |
| .736 | .0676 | | | | | | | | | | |
| .807 | | | | | | .0401 | .0549 | | | | |
| .850 | | | | | | .0940 | .1003 | | | | |
| .900 | .1096 | | | .0846 | .0750 | .0906 | .0922 | | | .0901 | |



AEDC VA352 CHMB 01 ORB. BOTTOM SURFACE WING (RTKL25) (25 APR 74)

REFERENCE DATA

| | | | | | |
|-------|---|--------------|-----|---|-----------|
| SEF | = | .0230 32 FT. | KMP | = | .0000 IN. |
| REF | = | 22.9003 IN. | KMP | = | .0000 IN. |
| DEF | = | 16.3915 IN. | ZMP | = | .0000 IN. |
| SCALE | = | .0195 SCALE | | | |

PARAMETRIC DATA

BETA = .000 RVAL = 2.000
B.F.LAP = 10.000 ELEVON = 17.000
HAW/HT = 1.000

| | | | | | | | | | | | | |
|------------|-------|-------------|--------|----|---|--------|----|---|-------|-----|---|------|
| MACH (1) = | 8.000 | ALPHA (1) = | 30.000 | TI | = | 94.650 | QI | = | 1.985 | WCF | = | .035 |
|------------|-------|-------------|--------|----|---|--------|----|---|-------|-----|---|------|

SECTION 1105M SURF. WING

DEPENDENT VARIABLE: HUSBAND

[illegible]

25

[illegible]

AEDC VA332 OH-8 01 ORB. BOTTOM SURFACE WING (RTKL25)

MACH (1) = 0.000 ALPHA (2) = 35.000 T1 = 94.850 Q1 = .985 HREF = .035

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE H0/H0

| Z/Y/B | .2500 | .3010 | .3480 | .4000 | .5000 | .6000 | .7500 | .8500 | .9000 | .9600 | .9930 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| X/C | | | | | | | | | | | |
| .001 | | .0553 | .0299 | | .3384 | .3109 | .2387 | .0601 | | .1293 | .1142 |
| .002 | | | | | | .4239 | | .1374 | | | .1017 |
| .003 | | | | | | .4100 | | .1439 | | | |
| .004 | | | | | | .4247 | | .1357 | | | |
| .005 | | | | | | .3708 | | .1441 | | | |
| .006 | | | | | | .3425 | | .1239 | | | |
| .007 | | | | | | .2807 | | .1252 | | | |
| .025 | .0453 | | | .1483 | .3301 | | .2595 | | | | |
| .050 | | | | | | | | | | | |
| .100 | | | | .1461 | | .1915 | .1820 | .2353 | | .1445 | .1573 |
| .150 | .0593 | | | | | | | | | | |
| .177 | | | | | .0362 | | | | | | |
| .200 | | | | .1013 | | .1351 | | | | | |
| .209 | .0751 | | | | | | | | | | |
| .300 | | | | | .0911 | .1050 | | .1484 | .3271 | .2496 | |
| .302 | | | | .0864 | | | | | | | |
| .303 | | | | | | | .1019 | | | | |
| .428 | | | | | .1168 | | .1239 | | | | |
| .444 | .0634 | | | | | | | | | | |
| .487 | | | | | | | | | | | |
| .500 | | | | | | | | | | | |
| .539 | | .0780 | | | | | .0993 | .1021 | | .2177 | |
| .590 | .0643 | | | | | | | | | | |
| .600 | | | | | .0790 | .0874 | | | .0686 | | |
| .700 | | .0766 | | | .0686 | .0435 | .0480 | | | .1673 | |
| .736 | .0846 | | | | | | | | | | |
| .800 | | | | | | .0352 | .0687 | | | | |
| .890 | | | | | | .1116 | .1206 | | | | |
| .900 | .1378 | | .1514 | .1251 | .1339 | .1139 | | | | .1519 | |

DATE 23 SEP 74

TABULATED DATA LISTING FOR O44B (AEDC VAS32)

PAGE 303

AEDC VAS32 O44B 01 ORG. BOTTOM SURFACE WING (RTKLS) (25 APR 74)

REFERENCE DATA

REF = .0236 33.71, XREF = .0000 IN.
 REF = 22.5603 IN., YREF = .0000 IN.
 REF = 16.3919 IN., ZREF = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RV/L = 2.000
 B,FLAP = 10.000 ELEVON = 10.000
 HAWAHT = 1.000

MACH (1) = 0.000 ALPHA (1) = 30.000 TI = 95.450 Q1 = 1.983 HREF = .039

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

| Z/Y/B | .2500 | .3010 | .3480 | .4000 | .5000 | .6000 | .7500 | .8500 | .9000 | .9500 | .9660 | .9930 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| X/C | .001 | .002 | .003 | .004 | .005 | .006 | .007 | .008 | .009 | .010 | .011 | .012 |
| .001 | .0758 | .0367 | .4523 | .2812 | .3525 | .0774 | .1573 | .1127 | .0369 | | | |
| .002 | | | .3615 | .3702 | .1873 | | | | | | | |
| .003 | | | .3380 | .1675 | .1490 | | | | | | | |
| .004 | | | .3065 | .1214 | .1108 | | | | | | | |
| .005 | | | .2615 | .2172 | .3379 | | | | | | | |
| .006 | | | .2141 | .4118 | .1976 | | | | | | | |
| .007 | | | .1637 | .1718 | .1823 | | | | | | | |
| .008 | | | .1120 | .1149 | .1017 | | | | | | | |
| .009 | | | .1082 | .1113 | .1198 | | | | | | | |
| .010 | | | .0753 | .0823 | .1017 | | | | | | | |
| .011 | | | .0754 | .0932 | .2743 | | | | | | | |
| .012 | | | .0634 | .0978 | .1754 | | | | | | | |
| .013 | | | .0737 | .0978 | .2017 | | | | | | | |
| .014 | | | .0708 | .0781 | .0734 | | | | | | | |
| .015 | | | .0688 | .0664 | .0662 | | | | | | | |
| .016 | | | .0628 | .0413 | .0651 | | | | | | | |
| .017 | | | .0511 | .0959 | .1260 | | | | | | | |
| .018 | | | .0411 | .0876 | .0999 | | | | | | | |
| .019 | | | .0371 | .0818 | .0876 | | | | | | | |
| .020 | | | .0311 | .0818 | .0876 | | | | | | | |
| .021 | | | .0251 | .0818 | .0876 | | | | | | | |
| .022 | | | .0191 | .0818 | .0876 | | | | | | | |
| .023 | | | .0131 | .0818 | .0876 | | | | | | | |
| .024 | | | .0071 | .0818 | .0876 | | | | | | | |
| .025 | | | .0011 | .0818 | .0876 | | | | | | | |

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.367 Q1 = 3.936 WREF = .049
 AEDC VA352 OMB 01 ORB. BOTTOM SURFACE WING (7TKL27)

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE HU/40

Z/Y 2500 3010 3480 4000 5000 6000 7500 8500 9000 9500 9900 9930

X/C

| | | | | | | | | | | | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| .001 | .0511 | .0302 | .3689 | .2607 | .3619 | .0813 | | | .1258 | .1122 | .0990 |
| .002 | | | .3446 | .1703 | | | | | | | |
| .003 | | | .3031 | .1727 | | | | | | | |
| .004 | | | .3385 | .1844 | | | | | | | |
| .005 | | | .2607 | .1820 | | | | | | | |
| .006 | | | .2387 | .1925 | | | | | | | |
| .007 | | | .2410 | .1925 | | | | | | | |
| .025 | | | .1486 | .3459 | | .4223 | | | | | |
| .050 | | | | | | | | | .1304 | | |
| .100 | | | .1456 | .1676 | .3768 | .2624 | | | .1300 | | |
| .153 | | | | | | | | | | | |
| .177 | | | | | | | | | | | |
| .200 | | | .1073 | .1040 | | | | | | | |
| .299 | | | .0832 | | | | | | | | |
| .300 | | | | .1366 | | | | | | | |
| .302 | | | .0966 | .1159 | .1200 | .3748 | .3116 | .2436 | | | |
| .303 | | | | | | | | | | | |
| .426 | | | | .1310 | | | | | | | |
| .444 | | | .0833 | | | | | | | | |
| .467 | | | | .2660 | | | | | | | |
| .500 | | | | | | | | | .1973 | | |
| .559 | | | .1609 | | | .2364 | .3979 | | | | |
| .590 | | | .0921 | | | | | | | | |
| .600 | | | | .2182 | .1142 | | | .1853 | | | |
| .700 | | | .1709 | .2312 | .1833 | .1636 | | | .2084 | | |
| .756 | | | .2165 | | | | | | | | |
| .800 | | | | .2599 | .3235 | | | | | | |
| .850 | | | | .3426 | .3773 | | | | | | |
| .900 | | | .1442 | .2677 | .2950 | .3112 | .3246 | | .2481 | | |

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.367 Q1 = 3.936 WREF = .049

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE HU/40

Z/Y 2500 3010 3480 4000 5000 6000 7500 8500 9000 9500 9900 9930

X/C

| | | | | | | | | | | | |
|------|-------|-------|-------|-------|-------|-------|--|--|-------|-------|-------|
| .001 | .0548 | .0319 | .3510 | .3226 | .2493 | .0717 | | | .1631 | .1317 | .1273 |
| .002 | | | .4241 | | | | | | | | |
| .003 | | | .4181 | | | | | | | | |
| .004 | | | .4356 | | | | | | | | |
| .005 | | | .3963 | | | | | | | | |
| .006 | | | | | | | | | | | |
| .007 | | | .3712 | | | | | | | | |
| .025 | | | .3175 | | | .2251 | | | | | |
| .050 | | | .1555 | .3425 | | .2722 | | | | | |

(ATK 27)

$$\text{MACH} (1) = 0.000 \quad \text{ALPHA} (3) = 39.000$$

| SECTION (1) BOTTOM SURF. WING | DEPENDENT VARIABLE MUAD |
|-------------------------------|-------------------------|
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |
| 10 | 10 |
| 11 | 11 |
| 12 | 12 |
| 13 | 13 |
| 14 | 14 |
| 15 | 15 |
| 16 | 16 |
| 17 | 17 |
| 18 | 18 |
| 19 | 19 |
| 20 | 20 |
| 21 | 21 |
| 22 | 22 |
| 23 | 23 |
| 24 | 24 |
| 25 | 25 |
| 26 | 26 |
| 27 | 27 |
| 28 | 28 |
| 29 | 29 |
| 30 | 30 |
| 31 | 31 |
| 32 | 32 |
| 33 | 33 |
| 34 | 34 |
| 35 | 35 |
| 36 | 36 |
| 37 | 37 |
| 38 | 38 |
| 39 | 39 |
| 40 | 40 |
| 41 | 41 |
| 42 | 42 |
| 43 | 43 |
| 44 | 44 |
| 45 | 45 |
| 46 | 46 |
| 47 | 47 |
| 48 | 48 |
| 49 | 49 |
| 50 | 50 |
| 51 | 51 |
| 52 | 52 |
| 53 | 53 |
| 54 | 54 |
| 55 | 55 |
| 56 | 56 |
| 57 | 57 |
| 58 | 58 |
| 59 | 59 |
| 60 | 60 |
| 61 | 61 |
| 62 | 62 |
| 63 | 63 |
| 64 | 64 |
| 65 | 65 |
| 66 | 66 |
| 67 | 67 |
| 68 | 68 |
| 69 | 69 |
| 70 | 70 |
| 71 | 71 |
| 72 | 72 |
| 73 | 73 |
| 74 | 74 |
| 75 | 75 |
| 76 | 76 |
| 77 | 77 |
| 78 | 78 |
| 79 | 79 |
| 80 | 80 |
| 81 | 81 |
| 82 | 82 |
| 83 | 83 |
| 84 | 84 |
| 85 | 85 |
| 86 | 86 |
| 87 | 87 |
| 88 | 88 |
| 89 | 89 |
| 90 | 90 |
| 91 | 91 |
| 92 | 92 |
| 93 | 93 |
| 94 | 94 |
| 95 | 95 |
| 96 | 96 |
| 97 | 97 |
| 98 | 98 |
| 99 | 99 |
| 100 | 100 |

| 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 | 2048 | 2049 | 2050 | 2051 | 2052 | 2053 | 2054 | 2055 | 2056 | 2057 | 2058 | 2059 | 2060 | 2061 | 2062 | 2063 | 2064 | 2065 | 2066 | 2067 | 2068 | 2069 | 2070 | 2071 | 2072 | 2073 | 2074 | 2075 | 2076 | 2077 | 2078 | 2079 | 2080 | 2081 | 2082 | 2083 | 2084 | 2085 | 2086 | 2087 | 2088 | 2089 | 2090 | 2091 | 2092 | 2093 | 2094 | 2095 | 2096 | 2097 | 2098 | 2099 | 2100 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 | 2048 | 2049 | 2050 | 2051 | 2052 | 2053 | 2054 | 2055 | 2056 | 2057 | 2058 | 2059 | 2060 | 2061 | 2062 | 2063 | 2064 | 2065 | 2066 | 2067 | 2068 | 2069 | 2070 | 2071 | 2072 | 2073 | 2074 | 2075 | 2076 | 2077 | 2078 | 2079 | 2080 | 2081 | 2082 | 2083 | 2084 | 2085 | 2086 | 2087 | 2088 | 2089 | 2090 | 2091 | 2092 | 2093 | 2094 | 2095 | 2096 | 2097 | 2098 | 2099 | 2100 |

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| | | | | | |
|------|-------|-------|-------|-------|-------|
| .080 | .1720 | .2270 | .2140 | .4016 | .1757 |
| .100 | | | | | .1678 |
| .133 | .0960 | | | | |
| .177 | | .1322 | | | |
| .200 | .1450 | .1761 | | | |
| .236 | | | | | |
| .300 | .0770 | | | | |
| .323 | | .1608 | .1331 | .2569 | .4326 |
| .373 | .1664 | | | | .3039 |
| .426 | | | .1493 | | |
| .444 | .1004 | .1820 | | | |
| .487 | | | | | |
| .500 | | .2979 | | .1556 | .1663 |
| .539 | .2599 | | | | .2712 |
| .590 | .2000 | | | | |
| .600 | | .2307 | .1698 | | |
| .670 | .2321 | .1241 | .1366 | .0839 | .1266 |
| .736 | | | | | .2546 |
| .800 | .3070 | | | | |
| .850 | | .2731 | .2015 | .2015 | |
| .900 | | .3953 | .3385 | .3385 | |
| .970 | .1713 | .2914 | .3169 | .3466 | .2939 |

WING (1) = 0.000 ALPHA (2) = 30.000 AEDC VAS32 OH-8 O1 OH-8, BOTTOM SURFACE WING (RTUL28) $\gamma_1 = 97.300 \text{ Q1} = 3.930 \text{ WEP} = .049$

SECTION 1: BOTTOM SURF. WING DEPENDENT VARIABLE MU/NO

Z/Y = .2500 .3010 .3480 .4000 .5000 .6000 .7000 .8000 .9000 .9500 .9660 .9930

X/C

| | | | | | | | | | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| .001 | .0718 | .0387 | .4419 | .2883 | .3614 | .0730 | .1974 | .1132 | .0526 |
| .002 | | | .3467 | .3467 | .1978 | | | | |
| .003 | | | .3620 | .1678 | | | | | |
| .004 | | | .3379 | .1713 | | | | | |
| .005 | | | .3587 | .1902 | | | | | |
| .006 | | | .2643 | .1227 | | | | | |
| .007 | | | .2229 | .1136 | | | | | |
| .008 | .0848 | | .2042 | .4090 | .3688 | | | | |
| .009 | | | .1684 | .1776 | .2700 | .2026 | .1929 | | |
| .010 | .1136 | | | | | | .1526 | | |
| .011 | | | .1227 | | | | | | |
| .012 | .0733 | | .1099 | .1202 | | | | | |
| .013 | | | .1147 | .0921 | .1706 | .1208 | .1288 | | |
| .014 | | | .0896 | | .3629 | | | | |
| .015 | | | .1033 | | | | | | |
| .016 | .0871 | | .1207 | | .3241 | .2846 | .1032 | | |
| .017 | | | .1342 | | | | | | |
| .018 | .0828 | | .1637 | .0916 | | .1240 | .1316 | | |
| .019 | | | .2001 | .2246 | .1303 | | | | |
| .020 | | | | | | | | | |
| .021 | .1196 | | | .2426 | .3272 | | | | |
| .022 | | | | .3680 | .3999 | | | | |
| .023 | .1394 | | .3340 | .3156 | .3637 | .3374 | .2113 | | |

WING (1) = 0.000 ALPHA (3) = 35.000 $\gamma_1 = 97.300 \text{ Q1} = 3.930 \text{ WEP} = .049$

SECTION 1: BOTTOM SURF. WING DEPENDENT VARIABLE MU/NO

Z/Y = .2500 .3010 .3480 .4000 .5000 .6000 .7000 .8000 .9000 .9500 .9660 .9930

X/C

| | | | | | | | | | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| .001 | .0882 | .0411 | .3735 | .2708 | .2637 | .0880 | .1393 | .1272 | .1040 |
| .002 | | | .3239 | .1691 | | | | | |
| .003 | | | .3431 | .1738 | | | | | |
| .004 | | | .3385 | .1637 | | | | | |
| .005 | | | .3184 | .1853 | | | | | |
| .006 | | | .2960 | .1981 | | | | | |
| .007 | | | .2524 | .1986 | | | | | |
| .008 | .0866 | | .1642 | .3196 | .3146 | | | | |

TABULATED DATA LISTING FOR OHB (AEDC V-112)

(RTKL28)

AEDC VA352 OHB 01 ORB. BOTTOM SURFACE WING

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

| 2 Y/B | .2500 | .3010 | .3480 | .4000 | .5000 | .6000 | .7500 | .8500 | .9000 | .9600 | .9930 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| X/C | | | | | | | | | | | |
| .080 | | | | .1733 | | .1875 | .2561 | .2861 | | .1449 | |
| .100 | | | | | | | | | | .1550 | |
| .133 | .1200 | | | | .1199 | .1206 | | | | | |
| .177 | | | | .1233 | | | | | | | |
| .200 | | | | | | | | | | | |
| .299 | .0808 | | | | | .1047 | .3968 | .3208 | .2393 | | |
| .300 | | | | .1071 | .1194 | | | | | | |
| .302 | | | | | | | .1235 | | | | |
| .303 | | | | | | .1180 | | | | | |
| .428 | | | | | | | | | | | |
| .444 | .0749 | | | | | | | | | | |
| .487 | | | | .1387 | | | .1077 | .4070 | .1976 | | |
| .500 | | | | | | | | | | | |
| .559 | | | | .1290 | | | | | | | |
| .590 | .0963 | | | | | | | | | | |
| .600 | | | | .1314 | .1046 | | | .1615 | | | |
| .700 | | | | .1393 | .1922 | .0822 | .0986 | | | .2028 | |
| .736 | .1894 | | | | | | | | | | |
| .800 | | | | | | .2374 | .1598 | | | | |
| .850 | | | | | | .3939 | .3491 | | | | |
| .900 | .1822 | | | .3019 | .3421 | .3795 | .3382 | | | .2558 | |



DATE 23 SEP 74

TABULATED DATA LISTING FOR OHB (AEDC VAS32)

PAGE 311

AEDC VAS32 OHB 02 ORB. BOTTOM SURFACE WING (RTKL32) (25 APR 74)

REFERENCE DATA

WING = .0238 SQ.FT. XMRP = .0000 IN.
 REF = 22.5803 IN. YMRP = .0000 IN.
 REF = 18.3915 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RAYL = 1.000
 S.FLAP = .000 ELEVON = .000
 HANGHT = 1.000

MACH (1) = 0.000 ALPHA (1) = 30.000 T1 = 93.400 Q1 = 1.000 HREF = .024

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE MU/40

| 21/3 | .2500 | .3010 | .3480 | .4000 | .5000 | .6000 | .7500 | .8500 | .9000 | .9500 | .9860 | .9930 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| X/C | | | | | | | | | | | | |
| .001 | | .0443 | .0322 | | .2908 | .1676 | .2187 | .0468 | | .1004 | .0607 | .0201 |
| .002 | | | | | .1800 | .2639 | | .1800 | | | | |
| .003 | | | | | .3575 | | | .1802 | | | | |
| .004 | | | | | .4021 | | | .1685 | | | | |
| .005 | | | | | .3186 | | | .1553 | | | | |
| .006 | | | | | .3262 | | | .1300 | | | | |
| .007 | | | | | .2612 | | | .1183 | | | | |
| .008 | .0336 | | | .1706 | .3774 | | .3083 | | | | | |
| .009 | | | | .1625 | | .1615 | .1852 | .2133 | | .1368 | | |
| .010 | .1084 | | | | | | | | | .1334 | | |
| .011 | | | | .1079 | .1138 | | .1323 | | | | | |
| .012 | .0761 | | | .1079 | | .1057 | | .1651 | .1429 | .1339 | | |
| .013 | | | | .0908 | | | | | | | | |
| .014 | | | | | .1164 | | .1143 | | | | | |
| .015 | .0658 | | | .0936 | | | | | | | | |
| .016 | | | | .0715 | | .0981 | .1768 | | | .1316 | | |
| .017 | .0496 | | | | | | | | | | | |
| .018 | | | | .0793 | .0879 | | | | | | | |
| .019 | | | | .0634 | .0735 | .0584 | .0546 | | .1210 | .0998 | | |
| .020 | .0694 | | | | | .0331 | .0414 | | | | | |
| .021 | | | | | | .0600 | .0686 | | | | | |
| .022 | .0209 | | | .0426 | .0548 | .0456 | .0247 | | | .1082 | | |

TABULATED DATA LISTING FOR CHAB (AEDC VA352)

DATE 23 SEP 74

(R TKL 32)

MACH (1) = 8.000 ALPHA (3) = 45.000

AEDC VA352 Q448 Q2

ORIG. BOTTOM SURFACE WING

DEPENDENT VARIABLE HUSBAND

SECTION (1) BOTTOM SURF. WING

| | | | | | | | | | | | |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 249 | .2500 | .3010 | .3480 | .4000 | .5000 | .6000 | .7500 | .9000 | .9500 | .9660 | .9930 |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|

28

[illegible]

| AEDC VAS352 O4MB Q2 | | ORB. BOTTOM SURFACE WING | | (INFL33) |
|---------------------|-------|--------------------------|--------|-------------|
| MACH (1) = | 0.000 | ALPHA (2) = | 35.000 | Y1 = 94.250 |
| | | | | Q1 = 1.293 |
| | | | | MEP = .027 |

SECTION (1) BOTTOM SURF. WING

DEPENDENT VARIABLE HUMAN

[illegible]

AEDC VA352 OMB 02 ORB. BOTTOM SURFACE WING (RTKL34) (25 APR 74)

REFERENCE DATA

STEP = .8238 SQ.FT. XMRP = .0000 IN.
 STEP = 22.5803 IN. YMRP = .0000 IN.
 STEP = 18.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

SETA = .000 RN/L = 1.500
 B.FLAP = .000 ELEVON = .000
 HAWK/T = 1.000

MACH (1) = 6.000 ALPHA (1) = 30.000 T1 = 94.900 Q1 = 1.534 REF = .030

DEPENDENT VARIABLE MU/40

SECTION (1) BOTTOM SURF. WING

| 2Y/8 | .2500 | .3010 | .3480 | .4000 | .5000 | .6000 | .7500 | .8500 | .9000 | .9500 | .9660 | .9930 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| X/C | | | | | | | | | | | | |
| .001 | | .0434 | .0316 | | .2940 | .1832 | .2097 | .0466 | | .0982 | .0602 | .0078 |
| .002 | | | | | .2688 | .2688 | | .1811 | | | | |
| .003 | | | | | .3521 | .3521 | | .1773 | | | | |
| .004 | | | | | | .3912 | | .1672 | | | | |
| .005 | | | | | | .3133 | | .1565 | | | | |
| .006 | | | | | | .3238 | | .1381 | | | | |
| .007 | | | | | | .2678 | | .1252 | | | | |
| .025 | | | | .1689 | .3809 | | .2970 | | | | | |
| .050 | | | | .1588 | | .1833 | .1863 | .2176 | | .1341 | | |
| .100 | | | | | | | | | | .1404 | | |
| .153 | | | | | .1083 | | | | | | | |
| .177 | | | | | .1074 | | .1325 | | | | | |
| .200 | | | | | | | | | | | | |
| .293 | | | | .1074 | | | | | | | | |
| .300 | | | | | .1087 | .1087 | | .2847 | .1857 | .1444 | | |
| .302 | | | | .0908 | | | | | | | | |
| .303 | | | | | | | .1174 | | | | | |
| .428 | | | | | | .1167 | | | | | | |
| .444 | | | | | .0928 | | | | | | | |
| .487 | | | | | | | | | | | | |
| .500 | | | | | | | .0972 | .2746 | | .1829 | | |
| .559 | | | | .0718 | | | | | | | | |
| .590 | | | | | | | | | | | | |
| .600 | | | | | .0811 | .0885 | | | .1394 | | | |
| .700 | | | | .0705 | .0725 | .0660 | .0551 | | | .1143 | | |
| .736 | | | | | | | | | | | | |
| .800 | | | | | | .0319 | .0393 | | | | | |
| .850 | | | | | | .0497 | .0603 | | | | | |
| .900 | | | | .0427 | .0575 | .0463 | .0540 | | | .1215 | | |



MACH (1) = 0.000 ALPHA (2) = 35.000 TI = 94.800 QI = 1.534 WEEP = .030
 AEDC VA352 OH-6B 02 ORG. BOTTOM SURFACE WING (RTKL34)

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE HU/40

| 278 | .2500 | .3010 | .3480 | .4000 | .5000 | .6000 | .7500 | .8500 | .9000 | .9500 | .9680 | .9830 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| X/C | | .0436 | .0322 | | .2693 | .1975 | .1898 | .0373 | | .0910 | .0872 | .0498 |
| .001 | | | | | | .3251 | | .1457 | | | | |
| .002 | | | | | | .4586 | | .1546 | | | | |
| .003 | | | | | | .4664 | | .1455 | | | | |
| .004 | | | | | | .4077 | | .1418 | | | | |
| .006 | | | | | | .3840 | | .1233 | | | | |
| .007 | | | | | | .3138 | | .1190 | | | | |
| .025 | .0347 | | | .1575 | .3461 | | .2725 | | | | | |
| .050 | | | | .1591 | | .2164 | .1969 | .2150 | | .1346 | | |
| .100 | | | | | | | | | | .1491 | | |
| .153 | .1129 | | | | .1094 | | | | | | | |
| .177 | | | | .1109 | | .1500 | | | | | | |
| .200 | .0637 | | | | | | | | | | | |
| .299 | | | | | .1025 | .1141 | | .1479 | .3177 | .2598 | | |
| .300 | | | | .0949 | | | | | | | | |
| .332 | | | | | | | .1178 | | | | | |
| .303 | | | | | | .1356 | | | | | | |
| .428 | | | | | | | | | | | | |
| .444 | .0706 | | | | .0901 | | | | | | | |
| .487 | | | | | | | .1107 | .1130 | | .2231 | | |
| .500 | | | | .0769 | | | | | | | | |
| .559 | | | | | | | | | | | | |
| .590 | .0657 | | | | | | | | | | | |
| .600 | | | | .0843 | .1064 | | | | .0737 | | | |
| .700 | | .0772 | .0716 | .0616 | .0825 | | | | | .1227 | | |
| .736 | .0734 | | | | | | | | | | | |
| .800 | | | | .0355 | .0459 | | | | | | | |
| .850 | | | | .0590 | .0713 | | | | | | | |
| .900 | .0317 | | | .0520 | .0639 | .0548 | .0675 | | | .0906 | | |

AEDC VA332 OMB OR OMB. BOTTOM SURFACE WING (RTKL35)

MACH (1) = 8.000 ALPHA (2) = 35.000 T1 = 95.207 Q1 = 1.797 WEP = .035

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE MU/NO

X/C

| X/C | .2500 | .3010 | .3480 | .4000 | .5000 | .6000 | .7500 | .8500 | .9000 | .9500 | .9800 | .9930 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| .001 | | .0416 | .0319 | | .2802 | .1984 | .1854 | .0383 | | .0958 | .0884 | .1617 |
| .002 | | | | | .3165 | .3165 | .1879 | .15 | | | | |
| .003 | | | | | .4585 | .4585 | .14 | | | | | |
| .004 | | | | | .4833 | .4833 | .14 | | | | | |
| .005 | | | | | .4134 | .4134 | .149 | | | | | |
| .006 | | | | | .3917 | .3917 | .1324 | | | | | |
| .007 | | | | | .3139 | .3139 | .1353 | | | | | |
| .025 | .0396 | | | .1362 | .3484 | | .2713 | | | | | |
| .050 | | | | .1621 | | .2128 | .1993 | .2435 | | .1448 | | |
| .100 | .1114 | | | | | | | | | .1660 | | |
| .177 | | | | .1088 | | .1491 | | | | | | |
| .250 | .0846 | | | | | | | | | | | |
| .299 | | | | .1013 | .1115 | | .1699 | .3931 | .2683 | | | |
| .372 | | | | .0945 | | | .1162 | | | | | |
| .393 | | | | | .1362 | | | | | | | |
| .429 | | | | | | | | | | | | |
| .444 | .0756 | | | | .0911 | | .1100 | .1136 | | .2410 | | |
| .467 | | | | | | | | | | | | |
| .500 | | | | .0771 | | | | | | | | |
| .559 | .0892 | | | | .0852 | .1052 | | .0804 | | | | |
| .600 | | | | .0813 | .0741 | .0637 | .0620 | | | .1486 | | |
| .700 | .0812 | | | | | .0346 | .0456 | | | | | |
| .800 | | | | | .0592 | .0719 | | | | | | |
| .900 | .0422 | | | .0576 | .0644 | .0553 | .0673 | | | .1044 | | |

AEDC VA352 CHAB OF ORB, BOTTOM SURFACE VIEW

(RTXL36) (25 APR 74)

REFERENCE DATA

$\frac{947}{1000} = .947$ 30 P.T. $\frac{1410}{1000} = 1.410$ IN.
 $\frac{1410}{1000} = 1.410$ IN. $\frac{1410}{1000} = 1.410$ IN.
 $\frac{1410}{1000} = 1.410$ IN. $\frac{1410}{1000} = 1.410$ IN.
 $\frac{1410}{1000} = 1.410$ IN. $\frac{1410}{1000} = 1.410$ IN.

PARAMETRIC DATA

| | | | | | |
|--------|---|-------|--------|---|-------|
| BETA | = | .000 | FN/L | = | 2.000 |
| B_FLAP | = | .000 | E_EVON | = | .000 |
| HAU/-T | = | 1.000 | | | |

| | | | | |
|------------------|--------------------|-------------|------------|------------|
| MACH (1) = 8.000 | ALPHA (1) = 30.000 | YI = 94.987 | QI = 1.984 | WEF = .035 |
|------------------|--------------------|-------------|------------|------------|

SECTION (1) OCTOBER SURF. WING

DEPENDENT VARIABLE HUND

| 27-3 | .2500 | .3010 | .3480 | .4000 | .5000 | .6000 | .7500 | .8500 | .9000 | .9500 | .9800 | .9930 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1001 | | .0430 | .0317 | | .2939 | .1597 | .2204 | .0469 | | .1006 | .0601 | .0296 |
| 1002 | | | | | | .2656 | | .1838 | | | | |
| 1003 | | | | | | .3548 | | .1801 | | | | |
| 1004 | | | | | | .3020 | | .1756 | | | | |
| 1005 | | | | | | .3162 | | .1603 | | | | |
| 1006 | | | | | | .3279 | | .1476 | | | | |
| 1007 | | | | | | .2861 | | .1545 | | | | |
| 1008 | .0343 | | .1697 | .3731 | | | .3127 | | | .1340 | | |
| 1009 | | | | | | .1637 | .2207 | .2242 | | .1598 | | |
| 1010 | .1096 | | .1596 | | | | | | | | | |
| 1011 | | | | .1097 | | | | | | | | |
| 1012 | .0732 | | .1071 | | | .1346 | | | | | | |
| 1013 | | | | | .1060 | .1111 | | .9321 | .1940 | .1775 | | |
| 1014 | | | .0915 | | | | .1167 | | | | | |
| 1015 | | | | | | .1167 | | | | | | |
| 1016 | .0666 | | | | .0940 | | | | | .1906 | | |
| 1017 | | | | | | | | .3406 | | | | |
| 1018 | | | .0734 | | | | .0977 | | | | | |
| 1019 | .0462 | | | | | | | | .1927 | | | |
| 1020 | | | | | .0636 | .0662 | | | | | | |
| 1021 | .1000 | | .0770 | .0769 | .0557 | .0557 | .0553 | | | .1267 | | |
| 1022 | | | | | | | | | | | | |
| 1023 | .0861 | | | | | | | | | | | |
| 1024 | | | | | .0316 | .0316 | .0397 | | | | | |
| 1025 | .0500 | | | | .0513 | .0513 | .0622 | | | | | |
| 1026 | | | .0506 | .0661 | .0470 | .0470 | .0575 | | | | | |
| 1027 | .0372 | | | | | | | | | .1362 | | |

MACH (1) = 8.000 ALPHA (2) = 35.000 T1 = 94.987 Q1 = 1.984 WEP = .035
 AEDC VAS32 OMB OE OMB, BOTTOM SURFACE WING (RTL36)

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE MU/NO

Z/Y 2500 3010 3480 4000 5000 6000 7500 8500 9000 9500 9660 9930

Z/C

| | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--|
| .001 | .0448 | .0324 | .2585 | .1989 | .1870 | .0393 | .0993 | .0732 | .0298 | | |
| .002 | | | .3217 | .4582 | | .1315 | | | | | |
| .003 | | | | .4699 | | .1809 | | | | | |
| .004 | | | | .4183 | | .1558 | | | | | |
| .005 | | | | .3850 | | .1628 | | | | | |
| .006 | | | | .3179 | | .1430 | | | | | |
| .007 | | | | | | .1468 | | | | | |
| .008 | | | .1529 | .3438 | | .2888 | | | | | |
| .009 | | | .1612 | | .2129 | .2052 | .2899 | | .1556 | | |
| .010 | | | | | | | | | .1702 | | |
| .1117 | | | | | | | | | | | |
| .1094 | | | .1082 | | .1510 | | | | | | |
| .1007 | | | .1007 | .1094 | | .1845 | .3785 | .2771 | | | |
| .0946 | | | | | | | | | | | |
| .1129 | | | | .1392 | | | | | | | |
| .0831 | | | | | | .1103 | .1153 | .2499 | | | |
| .0841 | | | | | | | | | | | |
| .0868 | | | .0868 | .1080 | | | .0684 | | | | |
| .0773 | | | .0773 | .0858 | .0830 | | | .1634 | | | |
| .0348 | | | | .0348 | .0460 | | | | | | |
| .0507 | | | | .0507 | .0745 | | | | | | |
| .0584 | | | .0584 | .0584 | .0588 | | | .1244 | | | |

MACH (1) = 8.000 ALPHA (3) = 45.000 T1 = 94.987 Q1 = 1.984 WEP = .035

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE MU/NO

Z/Y 2500 3010 3480 4000 5000 6000 7500 8500 9000 9500 9660 9930

Z/C

| | | | | | | | | | | | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--|
| .001 | .0457 | .0315 | .1804 | .1480 | .1703 | .0284 | .0895 | .0484 | .0180 | | |
| .002 | | | .2417 | .4128 | | .1078 | | | | | |
| .003 | | | | .3805 | | .1145 | | | | | |
| .004 | | | | .3652 | | .1232 | | | | | |
| .005 | | | | .3204 | | .1182 | | | | | |
| .006 | | | | .2821 | | .1152 | | | | | |
| .007 | | | | | | .1095 | | | | | |
| .008 | | | .1871 | .2531 | | .2507 | | | | | |

AEDC VAS32 OMB OR OMB, BOTTOM SURFACE WING (RTLL36)

MACH (1) = 0.000 ALPHA (3) = 45.000

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE H/LAO

| Z/Y/B | .2500 | .3010 | .3480 | .4000 | .5000 | .6000 | .7500 | .8500 | .9000 | .9500 | .9930 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| N/C | | | | | | | | | | | |
| .080 | | | | .1476 | | .2167 | .2014 | .1750 | | .1032 | |
| .100 | | | | | | | | | | .1126 | |
| .133 | .1259 | | | | .0910 | | | | | | |
| .177 | | | | .1140 | | .1486 | | | | | |
| .200 | | | | | | | | | | | |
| .299 | .0933 | | | | .0998 | .1047 | | .1242 | .1472 | .1335 | |
| .300 | | | | .0966 | | | | | | | |
| .302 | | | | | | .1290 | | | | | |
| .303 | | | | | .1134 | | | | | | |
| .426 | | | | | | | | | | | |
| .444 | .0769 | | | .0966 | | | .1230 | .1270 | | .1110 | |
| .467 | | | | | | | | | | | |
| .500 | | | | .1012 | | | | | | | |
| .559 | | | | | | | | | | | |
| .590 | .0745 | | | | .0999 | .1143 | | | .0861 | | |
| .600 | | | | .1067 | .1049 | .0763 | .0742 | | | .0721 | |
| .700 | | | | | | | | | | | |
| .736 | .1107 | | | | | | | | | | |
| .800 | | | | | .0526 | .0591 | | | | | |
| .820 | | | | | .0933 | .0976 | | | | | |
| .900 | .0877 | | | .1070 | .0667 | .0696 | .0666 | | | .0979 | |



AEDC VAS32 OH-6B OR ORB, BOTTOM SURFACE WING (RTKL37)

MACH (1) = 0.000 ALPHA (2) = 35.000 TI = 95.200 Q1 = 2.341 WEF = .030

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE MU/NO

Z1/3 .2500 .3010 .3480 .4000 .5000 .6000 .7500 .9000 .9500 .9850 .9930

X/C

| | | | | | | | | | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| .001 | .0410 | .0320 | .2591 | .1980 | .1830 | .0402 | .1075 | .0749 | .0332 |
| .002 | | | .3230 | .4389 | .1576 | | | | |
| .003 | | | .4744 | .4191 | .1717 | | | | |
| .004 | | | .3843 | .3132 | .1847 | | | | |
| .005 | | | .1533 | .3421 | .1674 | | | | |
| .006 | | | .1122 | .1082 | .1780 | | | | |
| .007 | | | .1596 | .2134 | .2082 | | | | |
| .008 | | | .1122 | .1531 | .2102 | .3169 | .1655 | | |
| .009 | | | .1094 | .1047 | .1172 | .2021 | .4068 | .2890 | |
| .010 | | | .1010 | .0799 | .1123 | .1196 | .3658 | | |
| .011 | | | .1081 | .0873 | .0720 | .0862 | .1004 | .1836 | |
| .012 | | | | .0400 | .0486 | | | | |
| .013 | | | | .0688 | .0777 | | | | |
| .014 | | | .0865 | .0794 | .0651 | .0693 | .1372 | | |



AEDC VA352 OH-8 02 ORB. BOTTOM SURFACE WING (RTL36)

MACH (1) = 8.000 ALPHA (2) = 35.000 YI = 99.550 QI = 2.536 WIEF = .039

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

| 2 Y/S | .2500 | .3010 | .3490 | .4000 | .5000 | .6000 | .7500 | .8500 | .9000 | .9500 | .9900 | .9930 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| X/C | | .0419 | .0326 | | .2607 | .1967 | .1803 | .0417 | .1119 | .0766 | .0517 | |
| .001 | | | | | | .3232 | .1654 | | | | | |
| .002 | | | | | | .4657 | .1894 | | | | | |
| .003 | | | | | | .4717 | .1836 | | | | | |
| .004 | | | | | | .4179 | .2024 | | | | | |
| .005 | | | | | | .3776 | .1871 | | | | | |
| .006 | | | | | | .3170 | .1973 | | | | | |
| .007 | | | | | | | .2690 | | | | | |
| .025 | .0348 | | | .1520 | .3378 | | | | | | | |
| .050 | | | | .1567 | | .2137 | .1376 | .3457 | | .1713 | | |
| .100 | | | | | | | | | | .1020 | | |
| .153 | .1103 | | | | | | | | | | | |
| .177 | | | | | .1086 | | | | | | | |
| .200 | | | | .1136 | | .1567 | | | | | | |
| .299 | .0830 | | | | | | | | | | | |
| .300 | | | | | .1070 | .1196 | | .2208 | .4167 | .2939 | | |
| .302 | | | | .1017 | | | | | | | | |
| .303 | | | | | | | .1189 | | | | | |
| .428 | | | | | | .1481 | | | | | | |
| .444 | .0752 | | | | | | | | | | | |
| .487 | | | | | .1069 | | | | | | | |
| .500 | | | | | | | .1166 | .1248 | | .2740 | | |
| .559 | | | | .1152 | | | | | | | | |
| .590 | .0638 | | | | | | | | | | | |
| .600 | | | | | .1097 | .1221 | | | .1091 | | | |
| .700 | | | | .1263 | .1068 | .0808 | .0878 | | | .1989 | | |
| .736 | .1676 | | | | | | | | | | | |
| .800 | | | | | | .0485 | .0823 | | | | | |
| .850 | | | | | | .0813 | .0818 | | | | | |
| .900 | .1022 | | | .1102 | .0832 | .0792 | .0738 | | | .1540 | | |

AEDC VA352 OH-6B O2 ORB. BOTTOM SURFACE WING (RTLL39) (25 APR 74)

REFERENCE DATA

REF = .9238 SQ.FT. XMRP = .0000 IN.
 LREF = 22.9802 IN. YMRP = .0000 IN.
 BREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.750
 B.FLAP = .000 ELEVON = .000
 HAV/HT = 1.000

MACH (1) = 9.000 ALPHA (1) = 30.000 TI = 98.100 QI = 2.816 HREF = .041

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE MU/40

| Z1/9 | .2500 | .3010 | .3480 | .4000 | .5000 | .6000 | .7500 | .8500 | .9000 | .9500 | .9800 | .9930 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| X/C | | | | | | | | | | | | |
| .001 | | .0425 | .0318 | | .2920 | .1677 | .2340 | .0513 | | .0984 | .0613 | .0819 |
| .002 | | | | | .2837 | .2837 | .1631 | | | | | |
| .003 | | | | | .3564 | .3564 | .1859 | | | | | |
| .004 | | | | | .3930 | .3930 | .1787 | | | | | |
| .005 | | | | | .3256 | .3256 | .1722 | | | | | |
| .006 | | | | | .3300 | .3300 | .1699 | | | | | |
| .007 | | | | | .2647 | .2647 | .1617 | | | | | |
| .025 | .0350 | | | .1605 | .3723 | | .3581 | | | | | |
| .050 | | | | .1590 | | .1778 | .3222 | .2435 | | .1346 | | |
| .100 | .1044 | | | | | | | | | .1396 | | |
| .153 | | | | | .1078 | | | | | | | |
| .177 | | | | | | .1392 | | | | | | |
| .200 | .0776 | | | .1083 | | | | | | | | |
| .299 | | | | .0932 | .1119 | .1172 | | .3608 | .2754 | .2089 | | |
| .300 | | | | | | | .1201 | | | | | |
| .302 | | | | | | | | | | | | |
| .303 | | | | | | .1233 | | | | | | |
| .428 | .0839 | | | | .1008 | | | | | | | |
| .444 | | | | | | | .1084 | .4039 | | .2091 | | |
| .487 | | | | | | | | | | | | |
| .500 | | | | .0894 | | | | | | | | |
| .559 | .0868 | | | | .1132 | .0936 | | | | | | |
| .590 | | | | .1027 | .1422 | .0708 | .0642 | | .1861 | | | |
| .700 | | | | | | | | | | .1509 | | |
| .736 | .1080 | | | | | | | | | | | |
| .800 | | | | | | .0427 | .0480 | | | | | |
| .850 | | | | | | .0690 | .0704 | | | | | |
| .900 | .0746 | | | .0818 | .1189 | .0621 | .0800 | | | | .1582 | |

AEDC VAS352 OH-1B O2 ORB. BOTTOM SURFACE WING (RTKL39)

MACH (1) = 8.000 ALPHA (2) = 35.000 T1 = 96.100 Q1 = 2.816 HREF = .041

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

| Z/Y/B | .2500 | .3010 | .3480 | .4000 | .5000 | .6000 | .7500 | .8500 | .9000 | .9500 | .9680 | .9930 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| X/C | | | | | | | | | | | | |
| .001 | | .0417 | .0329 | | .2597 | .1997 | .1842 | .0428 | | .1150 | .0784 | .0323 |
| .002 | | | | | .2250 | .1753 | | .1753 | | | | |
| .003 | | | | | .4815 | .1965 | | .1965 | | | | |
| .004 | | | | | .4854 | .1966 | | .1966 | | | | |
| .006 | | | | | .4192 | .2185 | | .2185 | | | | |
| .008 | | | | | .3820 | .1993 | | .1993 | | | | |
| .007 | | | | | .3145 | .2135 | | .2135 | | | | |
| .025 | .0356 | | | .1525 | .3443 | | .2688 | | | | | |
| .050 | | | | | | | | | | .1785 | | |
| .100 | | | | .1819 | | .2203 | .2079 | .3714 | | .1889 | | |
| .153 | .1157 | | | | | | | | | | | |
| .177 | | | | | .1147 | | | | | | | |
| .200 | | | | .1159 | | .1609 | | | | | | |
| .299 | .0838 | | | | | | | | | | | |
| .300 | | | | | .1196 | .1186 | | .2354 | .4434 | .3052 | | |
| .302 | | | | .1068 | | | | | | | | |
| .303 | | | | | | | .12~4 | | | | | |
| .428 | | | | | .1551 | | | | | | | |
| .444 | .0711 | | | | | | | | | | | |
| .467 | | | | | .1200 | | .1226 | .1320 | | .2832 | | |
| .500 | | | | .1455 | | | | | | | | |
| .559 | | | | | | | | | | | | |
| .590 | .1038 | | | | | | | | | | | |
| .600 | | | | .1240 | .1382 | | | | .1183 | | | |
| .700 | | | | .1233 | .0930 | .0703 | | | | | .2157 | |
| .736 | .2076 | | | | | | | | | | | |
| .800 | | | | | .0603 | .0649 | | | | | | |
| .850 | | | | | .0946 | .0858 | | | | | | |
| .900 | .1056 | | | .1314 | .1053 | .0927 | .0776 | | | | .1606 | |



DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-1B (AEDC VA352)

PAGE 329

AEDC VA352 OH-1B O2 ORG. BOTTOM SURFACE WING (RTKLAD) (25 APR 74)

REFERENCE DATA

STEP = .0238 SQ.FT. XMRP = .0000 IN.
 STEP = 22.5803 IN. YMRP = .0000 IN.
 STEP = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 TR/L = 3.000
 B.FLAP = .000 ELEVON = .000
 HAW/HT = 1.000

MACH (1) = 0.000 ALPHA (1) = 30.000 T1 = 96.900 Q1 = 3.118 HREF = .044
 SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE HJ/HO

2 Y/B .2500 .3010 .3480 .4000 .5000 .6000 .7500 .8500 .9000 .9500 .9860 .9930
 X/C

X/C

| | | | | | | | | | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| .001 | .0414 | .0324 | .2908 | .1831 | .8490 | .0817 | .0994 | .0819 | .0268 |
| .002 | | | .2841 | .1843 | | | | | |
| .003 | | | .3567 | .1849 | | | | | |
| .004 | | | .3835 | .1885 | | | | | |
| .005 | | | .3180 | .1801 | | | | | |
| .006 | | | .3280 | .1816 | | | | | |
| .007 | | | .2634 | .1742 | | | | | |
| .025 | .0346 | | .1600 | .3746 | .3814 | | | | |
| .050 | | | .1591 | | | .1394 | | | |
| .100 | .1024 | | | .1819 | .3550 | .2589 | | .1420 | |
| .150 | | | | | | | | | |
| .177 | | | .1070 | | | | | | |
| .200 | .0757 | | | .1386 | | | | | |
| .299 | | | .1078 | | | | | | |
| .300 | | | | .1112 | .1220 | .3953 | .3036 | .2336 | |
| .302 | | | .0924 | | | | | | |
| .303 | | | | | .1254 | | | | |
| .428 | | | | .1241 | | | | | |
| .444 | .0668 | | | | | | | | |
| .487 | | | | .1112 | | | | | |
| .500 | | | .0993 | | .1164 | .4244 | | .2131 | |
| .519 | | | | | | | | | |
| .590 | .0857 | | | | | | | | |
| .600 | | | | .1459 | .1098 | | | | |
| .700 | | | .1192 | .1889 | .0945 | .0945 | .1783 | .1611 | |
| .736 | .1462 | | | | | | | | |
| .800 | | | | .0685 | .0939 | | | | |
| .850 | | | | .0950 | .1355 | | | | |
| .900 | .0691 | | .1017 | .1417 | .0848 | .1199 | | .1631 | |

AEDC VAS32 OH-1B 02 ORB. BOTTOM SURFACE WING (RTKL40)

MACH (1) = 0.000 ALPHA (2) = 35.000 T1 = 96.900 Q1 = 3.118 HREF = .044

SECTION (1) BOTTOM SURF. WING

DEPENDENT VARIABLE MU/HO

| 2 Y/B | .2500 | .3010 | .3480 | .4000 | .5000 | .6000 | .7500 | .8500 | .9000 | .9500 | .9660 | .9930 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| X/C | | | | | | | | | | | | |
| .001 | | .0417 | .0333 | | .2599 | .2017 | .1829 | .0438 | | .1196 | .0600 | .0334 |
| .002 | | | | | .3245 | .4617 | | .2095 | | | | |
| .003 | | | | | .4739 | .4181 | | .2398 | | | | |
| .004 | | | | | .3188 | .2244 | | .2369 | | | | |
| .005 | | | | | .3270 | .2705 | | | | | | |
| .006 | | | | | | | | | | | | |
| .007 | | | | | | | | | | | | |
| .008 | | | | | | | | | | | | |
| .009 | | | | | | | | | | | | |
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| .098 | | | | | | | | | | | | |
| .099 | | | | | | | | | | | | |
| .100 | | | | | | | | | | | | |



MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.600 Q1 = 3.536 HREF = .046 (RTKL41)

SECTION (1) BOTTOM SURF. WING

DEPENDENT VARIABLE MU/D

| 21/3 | .2500 | .3010 | .3480 | .4000 | .5000 | .6000 | .7500 | .8000 | .9000 | .9500 | .9680 | .9930 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| X/C | | | | | | | | | | | | |
| .001 | | .0416 | .0335 | | .2570 | .1988 | .1881 | .0454 | | .1217 | .0816 | .0365 |
| .002 | | | | | | .3128 | | .1938 | | | | |
| .003 | | | | | | .4703 | | .2229 | | | | |
| .004 | | | | | | .4786 | | .2351 | | | | |
| .005 | | | | | | .4274 | | .2349 | | | | |
| .006 | | | | | | .3349 | | .2453 | | | | |
| .007 | | | | | | .3361 | | .2561 | | | | |
| .025 | .0398 | | | .1592 | .3490 | | .2737 | | | | | |
| .050 | | | | | | | | | | .1631 | | |
| .100 | | | | .1375 | | .2353 | .2197 | .4227 | | .1992 | | |
| .155 | .1086 | | | | | | | | | | | |
| .177 | | | | | .1284 | | | | | | | |
| .200 | | | | .1333 | | .1773 | | | | | | |
| .223 | .0618 | | | | | | | | | | | |
| .300 | | | | | .1507 | .1409 | | .2913 | .4673 | .3237 | | |
| .302 | | | | .1393 | | | | | | | | |
| .303 | | | | | | | .1424 | | | | | |
| .426 | | | | | .1882 | | | | | | | |
| .444 | .0936 | | | | | | | | | | | |
| .467 | | | | | .1811 | | .1427 | .1616 | | .2966 | | |
| .500 | | | | .2327 | | | | | | | | |
| .559 | .1636 | | | | | | | | | | | |
| .600 | | | | .2016 | .2175 | | | | .1436 | | | |
| .700 | | | | .2366 | .2054 | .1833 | .0697 | | | .2369 | | |
| .736 | .3067 | | | | | | | | | | | |
| .800 | | | | | | .1266 | .1010 | | | | | |
| .850 | | | | | | .1779 | .1292 | | | | | |
| .900 | .1229 | | | .1906 | .1564 | .1681 | .1076 | | | .2017 | | |



DATE 23 SEP 74

TABULATED DATA LISTING FOR OM4B (AEDC V4352)

PAGE 333

AEDC V4352 OM4B OR ORB. BOTTOM SURFACE WING (RTKL42) (24 APR 74)

REFERENCE DATA

SREF = .0239 SQ.FT. XMRP = .0000 IN.
 YREF = 22.9503 IN. YMRP = .0000 IN.
 SREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 REI/L = 3.720
 S.FLAP = .000 ELEVON = .000
 HAU/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 γ_1 = 97.050 q_1 = 3.937 HREF = .049

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE MUAND

| Z/Y/B | .2500 | .3010 | .3480 | .4000 | .5000 | .6000 | .7500 | .8500 | .9000 | .9500 | .9840 | .9930 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| X/C | | | .0414 | .0331 | .2834 | .1689 | .2869 | .0822 | .1008 | .0708 | .0287 | |
| .001 | | | | | | .2851 | .1929 | | | | | |
| .002 | | | | | | .3494 | .1980 | | | | | |
| .003 | | | | | | .4017 | .2074 | | | | | |
| .004 | | | | | | .3227 | .2022 | | | | | |
| .005 | | | | | | .3365 | .2131 | | | | | |
| .006 | | | | | | .2713 | .2106 | | | | | |
| .007 | .0385 | | | .1630 | .3803 | | .4301 | | | | | |
| .008 | | | | .1659 | | .1931 | .4426 | .3037 | | .1404 | | |
| .009 | .1040 | | | | | | | | | .1505 | | |
| .010 | | | | .1197 | .1197 | | | | | | | |
| .011 | .0732 | | | .1197 | .1369 | | | .4274 | .3986 | .2616 | | |
| .012 | | | | .1120 | | | .1481 | | | | | |
| .013 | | | | | | .1667 | | | | | | |
| .014 | .0708 | | | | .1687 | | | | | | | |
| .015 | | | | | | .3219 | .4649 | | | .2299 | | |
| .016 | .0982 | | | .1736 | | | | | | | | |
| .017 | | | | | .2586 | .2832 | | | .1894 | | | |
| .018 | .2047 | .2619 | .2230 | .2093 | | | | | | .1845 | | |
| .019 | .2435 | | | | .1473 | .1787 | | | | | | |
| .020 | | | | | .1942 | .2186 | | | | | | |
| .021 | .1106 | .1593 | .1615 | .1705 | .1856 | | | | | .1778 | | |

AEDC VA332 Q-48 OR ORB. BOTTOM SURFACE WING (RTKL42)

MACH (1) = 8.000 ALPHA (2) = 35.000 T1 = 97.050 Q1 = 3.937 HREF = .049

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE H/MACH

| Z/R | .2500 | .3010 | .3480 | .4000 | .5000 | .6000 | .7500 | .8500 | .9000 | .9500 | .9930 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| X/C | | | | | | | | | | | |
| .001 | | .0420 | .0336 | | .2623 | .2036 | .1936 | .0463 | | .1273 | .0816 |
| .002 | | | | | | .3164 | | .2023 | | | .0354 |
| .003 | | | | | | .4709 | | .2330 | | | |
| .004 | | | | | | .4900 | | .2516 | | | |
| .005 | | | | | | .4507 | | .2731 | | | |
| .006 | | | | | | .4236 | | .2663 | | | |
| .007 | | | | | | .3568 | | .2764 | | | |
| .008 | | | | .1630 | .3638 | | .2679 | | | | |
| .009 | | | | | | | | | | .1913 | |
| .010 | | | | .1844 | | .2469 | .2327 | .4526 | | .2103 | |
| .011 | | | | | .1484 | | | | | | |
| .012 | | | | .1600 | | .1935 | | | | | |
| .013 | | | | | .1790 | .1597 | | .3137 | .4834 | .3384 | |
| .014 | | | | .1756 | | | .1631 | | | | |
| .015 | | | | | | .2144 | | | | | |
| .016 | | | | | .2369 | | | .1653 | .1921 | .3084 | |
| .017 | | | | .3054 | | | | | | | |
| .018 | | | | | .2636 | .2602 | | | .1555 | | |
| .019 | | | | .2737 | .2595 | .2435 | .1097 | | | .2460 | |
| .020 | | | | | | .1625 | .1494 | | | | |
| .021 | | | | | | .2199 | .2269 | | | | |
| .022 | | | | .2011 | .1855 | .2026 | .2272 | | | .2211 | |
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DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VAS38)

PAGE 335

AEDC VAS32 OMB 01-TID OBS. UPPER SURFACE WING (RTKLO1) (23 APR 74)

REFERENCE DATA

REF = .8236 90.FT. XWSP = .0000 IN.
 REF = 22.5803 IN. XWSP = .0000 IN.
 REF = 16.3919 IN. XWSP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 IN/L = 3.720
 S.FLAP = .000 ELEVON = .000
 HAWAHT = 1.000

MACH (1) = 0.000 ALPHA (1) = -10.000 TI = 97.600 QI = 3.935 WREF = .049
 SECTION (1) UPPER SURFACE WING DEPENDENT VARIABLE H1A40

Z/Y = .4000 .6000 .8000

X/C

.080 .0000 .2088 .0000
 .200 .0000 .0819 .0000
 .600 .0000 .0000 .0000
 .800 .0000 .0000 .0000
 .900 .0000 .0000 .0000
 .950 .0000 .0026 .0000

MACH (1) = 0.000 ALPHA (2) = -6.000 TI = 97.600 QI = 3.935 WREF = .049
 SECTION (1) UPPER SURFACE WING DEPENDENT VARIABLE H1A40

Z/Y = .4000 .6000 .8000

X/C

.080 .0000 .1754 .0000
 .200 .0000 .0429 .0000
 .600 .0000 .0000 .0000
 .800 .0000 .0000 .0000
 .900 .0000 .0000 .0000
 .950 .0000 .0082 .0000

MACH (1) = 0.000 ALPHA (3) = .000 TI = 97.600 QI = 3.935 WREF = .049
 SECTION (1) UPPER SURFACE WING DEPENDENT VARIABLE H1A40

Z/Y = .4000 .6000 .8000

X/C

.080 .0000 .1890 .0000
 .200 .0000 .0277 .0000
 .600 .0000 .0000 .0000
 .800 .0000 .0033 .0000
 .900 .0000 .0000 .0000
 .950 .0000 .0033 .0000

AEDC VAS32 OH-6B 01+110 OH-6B, UPPER SURFACE WING (RTK001)

MACH () = 8.000 ALPHA (4) = 5.000 Y1 = 97.600 Q1 = 3.935 HREF = .049

SECTION (1) UPPER SURFACE WING DEPENDENT VARIABLE: H1/A0

Z1/A0 .4000 .6000 .8000

X/C

| | | | |
|------|-------|-------|-------|
| .050 | .0000 | .1077 | .0000 |
| .200 | .0000 | .0213 | .0000 |
| .400 | .0000 | .0000 | .0000 |
| .600 | .0000 | .0000 | .0000 |
| .800 | .0000 | .0000 | .0000 |
| .900 | .0000 | .0000 | .0000 |
| .950 | .0000 | .0019 | .0000 |



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA352)

PAGE 337

AEDC VA352 OMB 01+110 OMB, UPPER SURFACE WING

(RTU02) (25 APR 74)

REFERENCE DATA

REF = .0238 SQ.FT. WARP = .0000 IN.
 REF = 22.3803 IN. WARP = .0000 IN.
 REF = 16.3919 IN. WARP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 6.000 BETA (1) = -2.070

TI = 97.350

QI =

3.942

HEF = .049

SECTION (1) UPPER SURFACE WING

DEPENDENT VARIABLE HEAD

27/8 .4000 .6000 .8000

1/C

.080 .0000 .1190 .0000
 .200 .0000 .0294 .0000
 .400 .0000 .0000 .0000
 .600 .0000 .0019 .0000
 .800 .0000 .0010 .0000
 .900 .0000 .0016 .0000

MACH (1) = 6.000 BETA (2) = .000

TI = 97.350

QI =

3.942

HEF = .049

SECTION (1) UPPER SURFACE WING

DEPENDENT VARIABLE HEAD

27/8 .4000 .6000 .8000

1/C

.080 .0000 .1280 .0000
 .200 .0000 .0277 .0000
 .400 .0000 .0000 .0000
 .600 .0000 .0033 .0000
 .800 .0000 .0000 .0000
 .900 .0000 .0033 .0000

PARAMETRIC DATA

ALPHA = .000 IN/L = 3.720
 B.F.LAP = .000 ELEVON = .000
 MAU/MIT = 1.000

AEDC V4352 OH4B 01+110 ORB. UPPER SURFACE WING

(RTKUG3) (25 APR 74)

REFERENCE DATA

REF = .8238 32.1 FT. XMP = .0000 IN.
 LREF = 22.5803 IN. YMP = .0000 IN.
 SREF = 16.3819 IN. ZMP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .0000 RAIL = .680
 SFLAP = .0000 ELEVON = .000
 HAW/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 93.425 Q1 = .682 HREF = .020

SECTION (1) UPPER SURFACE WING DEPENDENT VARIABLE HI/40

2Y/B .4000 .6000 .8000

X/C

.050 .0000 .1657 .0000
 .200 .0000 .0387 .0000
 .400 .0000 .0000 .0000
 .600 .0000 .0000 .0000
 .800 .0000 .0000 .0000
 .900 .0000 .0000 .0000
 .950 .0000 .0073 .0000

MACH (1) = 8.000 ALPHA (2) = -8.000 TI = 93.425 Q1 = .682 HREF = .020

SECTION (1) UPPER SURFACE WING DEPENDENT VARIABLE HI/40

2Y/B .4000 .6000 .8000

X/C

.050 .0000 .1782 .0000
 .200 .0000 .0434 .0000
 .400 .0000 .0000 .0000
 .600 .0000 .0000 .0000
 .800 .0000 .0000 .0000
 .900 .0000 .0000 .0000
 .950 .0000 .0045 .0000

MACH (1) = 8.000 ALPHA (3) = .000 TI = 93.425 Q1 = .682 HREF = .020

SECTION (1) UPPER SURFACE WING DEPENDENT VARIABLE HI/40

2Y/B .4000 .6000 .8000

X/C

.050 .0000 .1327 .0000
 .200 .0000 .0290 .0000
 .400 .0000 .0000 .0000
 .600 .0000 .0000 .0000
 .800 .0000 .0000 .0000
 .900 .0000 .0000 .0000
 .950 .0000 .0039 .0000



TABULATED DATA LISTING FOR OMB (AEDC VAS32)

DATE 23 SEP 74

WACH (1) = 8.000 ALPHA (4) = 5.000 T1 = 93.425 Q1 = .882 WEP = .020 (RTN003)

SECTION (1) UPPER SURFACE WING

DEPENDENT VARIABLE W1/M0

| 21/8 | .4000 | .6000 | .8000 |
|------|-------|-------|-------|
| X/C | | | |
| .050 | .0000 | .1147 | .0000 |
| .200 | .0000 | .0223 | .0000 |
| .800 | .0000 | .0000 | .0000 |
| .900 | | .0027 | .0000 |
| .950 | | .0000 | .0000 |
| .950 | .0000 | .0027 | .0000 |

AEDC VA352 OM4B 01+TID ORB. UPPER SURFACE WING (RTK004) (23 APR 74)

REFERENCE DATA

STEP = .0236 SQ.FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. XMRP = .0000 IN.
 BREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 RV/L = .680
 B, FLAP = .000 ELEVON = .000
 HAW/HT = 1.000

MACH (1) = 8.000 BETA (1) = -2.000 TI = 93.550 QI = .681 HREF = .020
 MACH (2) = 8.000 BETA (2) = .000 TI = 93.550 QI = .681 HREF = .020

SECTION (1) UPPER SURFACE WING DEPENDENT VARIABLE HI/40

ZY/B .4000 .6000 .8000

X/C

.080 .0000 .1247 .0000
 .200 .0000 .0283 .0000
 .400 .0000 .0000 .0000
 .600 .0000 .0000 .0000
 .800 .0000 .0000 .0000
 .900 .0000 .0000 .0000
 .950 .0000 .0025 .0000

MACH (1) = 8.000 BETA (2) = .000 TI = 93.550 QI = .681 HREF = .020

SECTION (1) UPPER SURFACE WING DEPENDENT VARIABLE HI/40

ZY/B .4000 .6000 .8000

X/C

.080 .0000 .1327 .0000
 .200 .0000 .0290 .0000
 .400 .0000 .0000 .0000
 .600 .0000 .0000 .0000
 .800 .0000 .0000 .0000
 .900 .0000 .0075 .0000
 .950 .0000 .0039 .0000



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC V4352)

PAGE 341

AEDC V4352 OMB Q1 ORB. UPPER SURFACE WING (RTK400) (25 APR 74)

REFERENCE DATA

STEP = .0238 IN. XMRP = .0000 IN.
 LREF = 22.5803 IN. XMRP = .0000 IN.
 BREF = 18.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
 B.FLAP = .000 ELEVON = .000
 HAW/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = -5.000 TI = 96.800 QI = 3.961 HREF = .049

DEPENDENT VARIABLE MU/MD

SECTION (1) UPPER SURFACE WING

2 Y/S .4000 .8000 .8000

X/C

.060 .1526 .2082 .2171
 .200 .0414 .0677 .0644
 .600 .0029 .3149 .0132
 .800 .0067 .0076 .0076
 .900 .0061 .0079 .0079
 .950 .0034 .0164 .0076

MACH (1) = 8.000 ALPHA (2) = .000 TI = 96.800 QI = 3.961 HREF = .049

DEPENDENT VARIABLE MU/MD

SECTION (1) UPPER SURFACE WING

2 Y/S .4000 .8000 .8000

X/C

.060 .0044 .0031 .0085
 .200 .1490 .1908 .2025
 .600 .0258 .0434 .0428
 .800 .2498 .0085 .0085
 .900 .0066 .0068 .0068
 .950 .0018 .0034 .0033

AEDC VA352 OH-6B 01 ORB. UPPER SURFACE WING (RTK011) (23 APR 74)

REFERENCE DATA

REF = .0236 SQ.FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. XMRP = .0000 IN.
 BREF = 16.3919 IN. XMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 6.000 ALPHA (1) = -0.000 TI = 93.000 Q1 = .020 HREF = .020

SECTION (1) UPPER SURFACE WING

DEPENDENT VARIABLE HU/HO

2 Y/B .4000 .6000 .8000

X/C

.080 .1373 .2068 .2237
 .200 .0369 .0515 .0527
 .800 .0043 .2968 .0166
 .800 .0081 .0101
 .900 .0070 .0108
 .990 .0094 .0071 .0112

MACH (1) = 6.000 ALPHA (2) = .000 TI = 93.000 Q1 = .020 HREF = .020

SECTION (1) UPPER SURFACE WING

DEPENDENT VARIABLE HU/HO

2 Y/B .4000 .6000 .8000

X/C

.080 .1339 .1880 .1983
 .200 .0264 .0338 .0439
 .600 .0021 .1928 .0090
 .800 .0045 .0082
 .900 .0045 .0068
 .990 .0037 .0043 .0065

PARAMETRIC DATA

BETA = .000 RN/L = .680
 B.FLAP = .000 ELEVON = .000
 HAWAHT = 1.000



DATE 23 SEP 74

TABULATED DATA LISTING FOR OH4B (AEDC VA352)

(RTKU12) (23 APR 74)

AEDC VA352 OH4B 01 ORB. UPPER SURFACE WING

PARAMETRIC DATA

BETA = .000 RV/L = .500
B.FLAP = .000 ELEVON = .000
HAWAHT = 1.000

REFERENCE DATA

SREF = .0238 SQ.FT. XMRP = .0000 IN.
LREF = 22.663 IN. XMRP = .0000 IN.
BREF = 16.553 IN. XMRP = .0000 IN.
SCALE = .0195 SCALE

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.400 QI = .524 HREF = .018

DEPENDENT VARIABLE MU/MD

SECTION (1) UPPER SURFACE WING

2Y/B .4000 .8000 .8000

X/C
.050 .0313 .0874 .1164
.200 .0043 .0112 .0126
.800 .0004 .0827 .0043
.800 .0006 .0035 .0035
.900 .0013 .0048 .0048
.950 .0017 .0025 .0072

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.400 QI = .524 HREF = .018

DEPENDENT VARIABLE MU/MD

SECTION (1) UPPER SURFACE WING

2Y/B .4000 .8000 .8000

X/C
.050 .0245 .0818 .0961
.200 .0033 .0117 .0107
.800 .0005 .0408 .0058
.800 .0004 .0043 .0043
.900 .0013 .0056 .0056
.950 .0019 .0028 .0075

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.400 QI = .524 HREF = .018

DEPENDENT VARIABLE MU/MD

SECTION (1) UPPER SURFACE WING

2Y/B .4000 .8000 .8000

X/C
.050 .0180 .0815 .0765
.200 .0028 .0110 .0097
.800 .0007 .0241 .0047
.800 .0014 .0036 .0036
.900 .0025 .0052 .0052
.950 .0028 .0035 .0075

AEDC VAS32 OH48 01 OH8, UPPER SURFACE WING (RTK13) (25 APR 74)

REFERENCE DATA

STEP = .0236 SQ.FT. XMRP = .0000 IN.
 LEET = 22.5803 IN. XMRP = .0000 IN.
 STEP = 18.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RV/L = 1.000
 B.FLAP = .000 ELEVON = .000
 HAWHT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.100 Q1 = 1.003 HREF = .025

SECTION (1) UPPER SURFACE WING DEPENDENT VARIABLE HU/40

Z Y/B .4000 .6000 .8000

X/C
 .090 .0226 .0799 .0832
 .200 .0026 .0109 .0096
 .600 .0005 .0141 .0068
 .800 .0004 .0004 .0053
 .900 .0015 .0071
 .950 .0017 .0032 .0098

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.100 Q1 = 1.003 HREF = .025

SECTION (1) UPPER SURFACE WING DEPENDENT VARIABLE HU/40

Z Y/B .4000 .6000 .8000

X/C
 .090 .0182 .0746 .0896
 .200 .0027 .0104 .0086
 .600 .0007 .0176 .0044
 .800 .0007 .0036
 .900 .0019 .0088
 .950 .0025 .0036 .0059

MACH (1) = 8.000 ALPHA (3) = 40.000 TI = 94.100 Q1 = 1.003 HREF = .025

SECTION (1) UPPER SURFACE WING DEPENDENT VARIABLE HU/40

Z Y/B .4000 .6000 .8000

X/C
 .090 .0133 .0626 .0834
 .200 .0020 .0064 .0062
 .600 .0016 .0491 .0013
 .800 .0010 .0011
 .900 .0019 .0036
 .950 .0025 .0043 .0073



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VAS32)

AEDC VAS32 OMB Q1 ORB. UPPER SURFACE WING (RTTU14) (23 APR 74)

REFERENCE DATA

STEP = .0236 SQ.FT. XMRP = .0000 IN.
 STEP = 22.5803 IN. XMRP = .0000 IN.
 STEP = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE
 BETA = .000 IN/L = 1.000
 B.FLAP = .000 ELEVON = .000
 HAW/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 99.350 Q1 = 1.994 HREF = .035

SECTION (1) UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

ZY/B .4000 .6000 .8000

X/C

.050 .0236 .0600 .0925
 .200 .0026 .0104 .0084
 .600 .0003 .0268 .0087
 .800 .0006 .0070 .0070
 .900 .0015 .0121 .0121
 .950 .0022 .0035 .0163

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 99.350 Q1 = 1.994 HREF = .035

SECTION (1) UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

ZY/B .4000 .6000 .8000

X/C

.050 .0176 .0761 .0846
 .200 .0022 .0102 .0087
 .600 .0002 .0135 .0087
 .800 .0007 .0087 .0087
 .900 .0019 .0066 .0066
 .950 .0029 .0049 .0120

AEDC VA352 OMB 01 ORB. UPPER SURFACE WING (RTKUS) (25 APR 74)

REFERENCE DATA

REF = .0236 SQ.FT. XMRP = .0000 IN.
 CEF = 22.5803 IN. XMRP = .0000 IN.
 DEF = 16.3919 IN. XMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
 B,FLAP = .000 ELEVON = .000
 MAW/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1) UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

ZY/B .4000 .6000 .8000

X/C

.050 .0319 .0868 .1083
 .200 .0028 .0100 .0095
 .600 .0006 .0320 .0086
 .800 .0023 .0078
 .900 .0042 .0153
 .950 .0049 .0075 .0225

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1) UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

ZY/B .4000 .6000 .8000

X/C

.050 .0224 .0619 .0918
 .200 .0024 .0092 .0077
 .600 .0008 .0246 .0109
 .800 .0010 .0120
 .900 .0035 .0202
 .950 .0036 .0078 .0252

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1) UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

ZY/B .4000 .6000 .8000

X/C

.050 .0172 .0782 .0736
 .200 .0034 .0101 .0087
 .600 .0007 .0161 .0085
 .800 .0007 .0075
 .900 .0031 .0094
 .950 .0038 .0074 .0172



TABULATED DATA LISTING FOR Q448 (AEDC 1A392)

DATE 23 SEP 74

(RTK018) (23 APR 74)

AEDC 1A392 Q448 Q1 ORG. UPPER SURFACE WING

PARAMETRIC DATA
 BETA = .0000 RV/L = 3.720
 S.FLAP = .0000 ELEVON = .0000
 HAW/HT = 1.0000

REFERENCE DATA

WING = .0238 SQ.FT. XREF = .0000 IN.
 REF = 22.5803 IN. XREF = .0000 IN.
 REF = 16.3919 IN. XREF = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 30.000 T1 = 97.500 Q1 = 3.958 WREF = .049

DEPENDENT VARIABLE MU/MD

SECTION (1) UPPER SURFACE WING

2149 .4000 .6000 .8000

1/C
 .080 .0225 .0608 .0982
 .200 .0037 .0100 .0276
 .600 .0008 .0291 .0106
 .800 .0009 .0124 .0124
 .900 .0032 .0199 .0199
 .950 .0042 .0072 .0266

DATE 23 SEP 74

TABULATED DATA LISTING FOR OHB (AEDC VA352)

PAGE 348

AEDC VA352 OHB 01 ORB. UPPER SURFACE WING (RTK017) (25 APR 74)

REFERENCE DATA

STEP = .0238 SQ.FT. XMRP = .0000 IN.
 STEP = 22.5803 IN. XMRP = .0000 IN.
 STEP = 18.3919 IN. XMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .0000 RN/L = 3.720
 B.FLAP = 10.000 ELEVON = 5.000
 MAX/MIN = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.700 QI = 3.949 HREF = .049
 SECTION (1) UPPER SURFACE WING DEPENDENT VARIABLE MU/AD

2Y/3 .4000 .6000 .8000

Y/C

.080 .0024 .0808 .1498
 .200 .0464 .0909 .1477
 .400 .0879 .2115 .1031
 .600 .1174 .0958
 .800 .0818 .1594
 .950 .0819 .0301 .1740

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.700 QI = 3.949 HREF = .049
 SECTION (1) UPPER SURFACE WING DEPENDENT VARIABLE MU/AD

2Y/3 .4000 .6000 .8000

Y/C

.080 .0017 .1077 .1598
 .200 .0478 .2084 .1745
 .400 .1003 .3048 .1542
 .600 .1351 .1718
 .800 .0854 .2871
 .950 .0753 .0308 .2359



DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-6B (AEDC VAS32)

PAGE 348

AEDC VAS32 OH-6B 01 ORG. UPPER SURFACE WING (RTRU20) (23 APR 74)

REFERENCE DATA

XREF = .0236 33.171. XREF = .0000 IN.
 YREF = 22.5603 IN. YREF = .0000 IN.
 ZREF = 19.3319 IN. ZREF = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
 B.FLAP = 10.000 ELEVON = 5.000
 HAN/AIT = 1.000

MACH (1) = 0.000 ALPHA (1) = 30.000 YI = 99.900 QI = 1.980 HREF = .035

SECTION (1) UPPER SURFACE WING DEPENDENT VARIABLE MUARD

ZYR .4000 .6000 .8000

X/C

.000 .0008 .0542 .1563
 .200 .0459 .0418 .1417
 .400 .0929 .0592 .0960
 .600 .1341 .0808
 .800 .0528 .0657
 .940 .0861 .0294 .0426

MACH (1) = 0.000 ALPHA (2) = 35.000 YI = 99.900 QI = 1.980 HREF = .035

SECTION (2) UPPER SURFACE WING DEPENDENT VARIABLE MUARD

ZYR .4000 .6000 .8000

X/C

.000 .0008 .0821 .1474
 .200 .0492 .0545 .1474
 .400 .1016 .0937 .1020
 .600 .1192 .0657
 .800 .0764 .0744
 .940 .0735 .0302 .0735

AEDC VA332 O-4B Q1 O-4B, UPPER SURFACE WING

(RTU022) (29 APR 74)

REFERENCE DATA

STEP = .0230 IN. STEP = .0000 IN.
 STEP = .0230 IN. STEP = .0000 IN.
 STEP = .0230 IN. STEP = .0000 IN.
 SCALE = .0195 SCALE

MACH (1) = 8.000 ALPHA (1) = 35.000

BETA = .000 TW/L = .900

S.F.LAP = 10.000 ELEVON = 3.000

HAWK/HT = 1.000

SECTION (1) UPPER SURFACE WING

DEPENDENT VARIABLE MU/MD

Z/Y/B .4000 .6000 .8000

Z/C

.080 .0010 .0894 .1396
 .200 .0000 .0470 .1443
 .400 .0046 .0498 .0970
 .600 .0331 .0819
 .800 .0261 .0873
 .950 .0666 .0302 .0819

MACH (1) = 3.000 ALPHA (2) = 35.000

BETA = .000 TW/L = .900

S.F.LAP = 10.000 ELEVON = 3.000

HAWK/HT = 1.000

SECTION (1) UPPER SURFACE WING

DEPENDENT VARIABLE MU/MD

Z/Y/B .4000 .6000 .8000

Z/C

.080 .0021 .0867 .1396
 .200 .0000 .0836 .1303
 .400 .1083 .0836 .1037
 .600 .0464 .0866
 .800 .0816 .0708
 .950 .0770 .0305 .0845



DATE 25 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VAS38)

PAGE 351

AEDC VAS38 OMB Q1 OMB UPPER SURFACE WING (RTKLE3) (25 APR 74)

REFERENCE DATA

REF = .4238 SQ.FT. WING = .0000 IN.
 REF = 22.5003 IN. WING = .0000 IN.
 REF = 10.3919 IN. WING = .0000 IN.
 SCALE = .0193 SCALE

PARAMETRIC DATA

BETA = .0000 IN/L = .000
 S.P.LAP = 10.000 ELEVON = 10.000
 MAX/MT = 1.000

MACH (1) = 0.000 ALPHA (1) = 25.000 TI = 93.433 Q1 = .921 HREF = .010

SECTION (1) UPPER SURFACE WING DEPENDENT VARIABLE HUAD

2Y/B .4000 .6000 .8000

X/C
 .030 .0008 .0808 .1756
 .200 .0447 .0396 .1395
 .400 .0470 .0422 .0463
 .600 .0817 .0730
 .800 .0433 .0811
 .940 .0379 .0296 .0372

MACH (1) = 0.000 ALPHA (2) = 30.000 TI = 93.433 Q1 = .921 HREF = .010

SECTION (1) UPPER SURFACE WING DEPENDENT VARIABLE HUAD

2Y/B .4000 .6000 .8000

X/C
 .030 .0011 .0498 .1629
 .200 .0468 .0477 .1441
 .400 .0941 .0488 .0582
 .600 .0712 .0411
 .800 .0268 .0548
 .940 .0368 .0301 .0627

MACH (1) = 0.000 ALPHA (3) = 35.000 TI = 93.433 Q1 = .921 HREF = .010

SECTION (1) UPPER SURFACE WING DEPENDENT VARIABLE HUAD

2Y/B .4000 .6000 .8000

X/C
 .030 .0010 .0874 .1556
 .200 .0464 .0547 .1469
 .400 .1097 .0591 .1031
 .600 .0863 .0468
 .800 .0817 .0507
 .940 .0756 .0303 .0647

DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-1B (AEDC VA352)

PAGE 352

AEDC VA352 OH-1B 01 ORG. UPPER SURFACE WING (RTK25) (25 APR 74)

REFERENCE DATA

STEP = .8238 SQ.FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. YMRP = .0000 IN.
 BREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RM/L = 2.000
 B.FLAP = 10.000 ELEVON = 10.000
 HAWK/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 τ_1 = 94.650 Q1 = 1.985 HREF = .035

SECTION (1) UPPER SURFACE WING

DEPENDENT VARIABLE HU/HO

Z Y/B .4000 .6000 .8000

X/C

.080 .0013 .0242 .1556
 .200 .0417 .0420 .1425
 .600 .0938 .0810 .0976
 .800 .1160 .0800
 .900 .0833 .0458
 .950 .0648 .0294 .0824

MACH (1) = 8.000 ALPHA (2) = 35.000 τ_1 = 94.350 Q1 = 1.985 HREF = .035

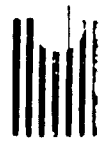
SECTION (1) UPPER SURFACE WING

DEPENDENT VARIABLE HU/HO

Z Y/B .4000 .6000 .8000

X/C

.080 .0012 .0634 .1483
 .200 .0453 .0643 .1481
 .600 .0993 .0846 .1013
 .800 .1378 .0864
 .900 .0659 .0780
 .950 .0751 .0299 .0768



AEDC VAB32 CHB 01 02B, UPPER SURFACE WING

(RTN187) (23 APR 74)

REFERENCE DATA

STEP 1 = .8238 IN. FT. RAMP = 10.000 IN.
 STEP 2 = 22.5003 IN. RAMP = 10.000 IN.
 STEP 3 = 18.3819 IN. RAMP = 10.000 IN.
 SCALE = 10.000 SCALE

MACH (1) = 8.000 ALPHA (1) = 25.000

Y1 = 97.367 Z1 = 3.939 HREF = .049

SECTION 1: UPPER SURFACE WING

DEPENDENT VARIABLE MU/NO

Z1/A 1.000 1.500 1.800

Y/C
 .080 .0032 .0478 .1596
 .200 .0433 .0395 .1367
 .400 .0810 .0831 .0979
 .600 .1115 .0722
 .800 .0434 .0615
 .970 .0685 .0263 .1111

MACH (2) = 8.000 ALPHA (2) = 35.000

Y1 = 97.367 Z1 = 3.939 HREF = .049

SECTION 1: UPPER SURFACE WING

DEPENDENT VARIABLE MU/NO

Z1/A 1.000 1.500 1.800

Y/C
 .080 .0022 .0633 .1458
 .200 .0469 .0921 .1716
 .400 .0706 .2195 .1073
 .600 .1442 .0386
 .800 .0511 .1909
 .970 .0892 .0302 .1703

MACH (3) = 8.000 ALPHA (3) = 35.000

Y1 = 97.367 Z1 = 3.939 HREF = .049

SECTION 1: UPPER SURFACE WING

DEPENDENT VARIABLE MU/NO

Z1/A 1.000 1.500 1.800

Y/C
 .080 .0022 .1004 .1555
 .200 .0469 .2000 .1720
 .400 .0960 .3070 .1450
 .600 .1713 .0364
 .800 .0549 .2599
 .970 .0770 .0315 .2321

PARAMETRIC DATA

BETA = .000 TH/L = 3.720
 S.F. CAP = 10.000 ELEVATION = 10.000
 HAD/WT = 1.000

(INTRVCI) (25 APR 74)

AEDC VAS352 QMB C14TIC ORB. LEFT VERTICAL TAIL

PARAMETRIC DATA

REFERENCE DATA

BETA = .0000
B.F.LAP = .0000
HEIGHT = 1.0000
BETA = .0000
B.F.LAP = .0000
HEIGHT = 1.0000

REF = .0238 SLFT. XMRP = .0000 IN.
REF = .023853 IN. XMRP = .0000 IN.
REF = .023853 IN. XMRP = .0000 IN.
SCALE = .0193 SCALE

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE HEAD

Z/4 .1590 .2990 .5320 .7650 .9090

X/C
.000 .0000 .4933 .4661 .4491
.010 .0000 .0000 .1298 .1394
.100 .0000 .0000 .0681 .0619
.300 .0000 .0000 .0000 .0160
.500 .0000 .0000 .0000 .0000
.700 .0000 .0000 .0000 .0139
.900 .0000 .0000 .0000 .0139

MACH (1) = 8.000 ALPHA (2) = -9.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE HEAD

Z/4 .1590 .2990 .5320 .7650 .9090

X/C
.000 .0000 .3173 .5571 .5093
.010 .0000 .0000 .1248 .0000
.100 .0000 .0000 .0679 .1248
.300 .0000 .0000 .0298 .0654
.500 .0000 .0000 .0000 .0399
.700 .0000 .0000 .0000 .0000
.900 .0000 .0000 .0000 .0092

MACH (1) = 8.000 ALPHA (3) = .000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE HEAD

Z/4 .1590 .2990 .5320 .7650 .9090

X/C
.000 .0000 .2990 .3535 .3671
.010 .0000 .0000 .0618 .0000
.100 .0000 .0000 .0649 .0618
.300 .0000 .0000 .0329 .0392
.500 .0000 .0000 .0000 .0270
.700 .0000 .0000 .0000 .0000
.900 .0000 .0000 .0000 .0094

TABULATED DATA LISTING FOR OH4B (AEDC VA332)

DATE 25 SEP 74

WACH (1) = 0.000 ALPHA (4) = 5.000 T1 = 97.600 Q1 = 3.935 HREF = .049 (RTW01)

SECTION (1) LEFT VERTICAL TAIL

Z/9V .1590 .2990 .3320 .7450 .9650

X/C

| | | | | |
|------|-------|-------|-------|-------|
| .020 | .0000 | .2741 | .3910 | .2999 |
| .010 | | | | .0000 |
| .100 | .0000 | .0608 | .0740 | |
| .300 | .0000 | .0274 | .0358 | |
| .500 | .0000 | .0000 | .0000 | .0238 |
| .700 | .0000 | .0000 | .0000 | |
| .900 | .0000 | .0000 | .0078 | |

DEPENDENT VARIABLE H1/H0

DATE 23 SEP 74

TABULATED DATA LISTING FOR O-4B (AEDC VAS32)

PAGE 356

AEDC VAS32 O-4B 01+710 ORB. LEFT VERTICAL TAIL (RTKV02) (25 APR 74)

REFERENCE DATA

STEP = .0239 80. FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. YMRP = .0000 IN.
 BREF = 18.3319 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 TAIL = 3.720
 S.F.LAP = .000 ELEVON = .000
 HAWAHT = 1.000

MACH (1) = 8.000 BETA (1) = -2.000 TI = 97.350 Q1 = 3.942 WEF = .049
 SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE H1/H0

Z/V .1590 .2990 .5320 .7550 .9050

X/C
 .000 .0000 .3313 .5756 .4219
 .010 .0000 .0000 .0000 .0000
 .100 .0000 .0000 .0734 .1087
 .300 .0000 .0000 .0425 .0428
 .500 .0000 .0000 .0000 .0324
 .700 .0000 .0000 .0000 .0000
 .900 .0000 .0000 .0000 .0120

MACH (1) = 8.000 BETA (2) = .000 TI = 97.350 Q1 = 3.942 WEF = .049
 SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE H1/H0

Z/V .1590 .2990 .5320 .7650 .9050

X/C
 .000 .0000 .2560 .3535 .3671
 .010 .0000 .0000 .0000 .0000
 .100 .0000 .0000 .0849 .0818
 .300 .0000 .0000 .0325 .0392
 .500 .0000 .0000 .0000 .0270
 .700 .0000 .0000 .0000 .0000
 .900 .0000 .0000 .0000 .0034



DATE 23 SEP 74 TABULATED DATA LISTING FOR OMB (AEDC VA352)

(RTKV03) (25 APR 74)

AEDC VA352 OMB 01+110 ORB. LEFT VERTICAL TAIL

REFERENCE DATA
 BREF = .0430 SQ.FT. XREF = .0000 IN.
 LREF = 22.5803 IN. YREF = .0000 IN.
 PREF = 16.3919 IN. ZREF = .0000 IN.
 SCALE = .0175 SCALE
 MACH (1) = 8.000 ALPHA (1) = -10.000 T1 = 93.425 Q1 = .020
 BETA = .000 RN/L = .680
 B.F.LAP = .000 ELEVON = .000
 HAWAHT = 1.000

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE H1/H0

Z/3V .1590 .2990 .5320 .7650 .9050

X/C
 .000 .0000 .4998 .7753 .9157
 .010 .0000 .0000 .1186 .1465
 .100 .0000 .0000 .0555 .0810
 .300 .0000 .0000 .0000 .0208
 .500 .0000 .0000 .0000 .0000
 .700 .0000 .0000 .0000 .0000
 .900 .0000 .0000 .0000 .0000

MACH (1) = 8.000 ALPHA (2) = -5.000 T1 = 93.425 Q1 = .020
 BETA = .000 HREF = .020

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE H1/H0

Z/3V .1590 .2990 .5320 .7650 .9050

X/C
 .000 .0000 .3270 .5174 .5769
 .010 .0000 .0000 .0852 .1154
 .100 .0000 .0000 .0388 .0433
 .300 .0000 .0000 .0000 .0000
 .500 .0000 .0000 .0000 .0000
 .700 .0000 .0000 .0000 .0000
 .900 .0000 .0000 .0000 .0000

MACH (1) = 8.000 ALPHA (3) = .000 T1 = 93.425 Q1 = .020
 BETA = .000 HREF = .020

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE H1/H0

Z/3V .1590 .2990 .5320 .7650 .9050

X/C
 .000 .0000 .2723 .3978 .4172
 .010 .0000 .0000 .0875 .0813
 .100 .0000 .0000 .0341 .0422
 .300 .0000 .0000 .0000 .0000
 .500 .0000 .0000 .0000 .0000
 .700 .0000 .0000 .0000 .0000
 .900 .0000 .0000 .0000 .0000

DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA332)

PAGE 398

WACH (1) = 8.000 ALPHA (4) = 5.000 T1 = 93.425 Q1 = .682 HREF = .020 (RTN003)

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE H1/M0

| Z/9V | .1590 | .2990 | .5320 | .7650 | .9050 |
|------|-------|-------|-------|-------|-------|
| X/C | | | | | |
| .000 | .0000 | .2769 | .4247 | .3336 | .0000 |
| .010 | .0000 | .0000 | .0814 | .0757 | .0000 |
| .100 | .0000 | .0000 | .3262 | .0358 | .0234 |
| .200 | .0000 | .0000 | .0000 | .0000 | .0000 |
| .300 | .0000 | .0000 | .0000 | .0000 | .0000 |
| .400 | .0000 | .0000 | .0000 | .0000 | .0000 |
| .500 | .0000 | .0000 | .0000 | .0000 | .0000 |
| .600 | .0000 | .0000 | .0000 | .0000 | .0000 |
| .700 | .0000 | .0000 | .0000 | .0000 | .0000 |
| .800 | .0000 | .0000 | .0000 | .0000 | .0000 |
| .900 | .0000 | .0000 | .0000 | .0000 | .0000 |



DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-108 (AEDC VAS32)

PAGE 359

AEDC VAS32 OH-108 ORB. LEFT VERTICAL TAIL

(RTKVOM) (25 APR 74)

REFERENCE DATA

SUT = .8238 30. FT. WHP = .0000 IN.
 REF = 22.5803 IN. WHP = .0000 IN.
 REF = 16.3919 IN. WHP = .0000 IN.
 SCALE = .0195 SCALE

PARAMETRIC DATA

ALPHA = .000 SN/L = .680
 B.FLAP = .000 ELEVON = .000
 HAW/HT = 1.000

MACH (1) = 8.000 BETA (1) = -2.000 TI = 93.450 QI = .681 HREF = .020

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE HEAD

Z/2V .1590 .2990 .5320 .7650 .9080

X/C

.000 .0000 .3722 .6862 .4702
 .010 .0000 .0000 .0787 .0000
 .100 .0000 .0000 .1041
 .300 .0000 .0000 .0443 .0441
 .500 .0000 .0000 .0000 .0000
 .700 .0000 .0000 .0000 .0329
 .900 .0000 .0000 .0000 .0000
 .0128

MACH (1) = 8.000 BETA (2) = .000 TI = 93.450 QI = .681 HREF = .020

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE HEAD

Z/2V .1590 .2990 .5320 .7650 .9080

X/C

.000 .0000 .2723 .3978 .4172
 .010 .0000 .0000 .0813 .0000
 .100 .0000 .0000 .0341 .0422
 .300 .0000 .0000 .0000 .0273
 .500 .0000 .0000 .0000 .0000
 .700 .0000 .0000 .0000 .0000
 .900 .0000 .0000 .0000 .0100

AEDC VA352 OMB Q1 ORB. LEFT VERTICAL TAIL (RTKVID) (23 APR 74)

REFERENCE DATA

STEP = .0236 SQ.FT. XMP = .0000 IN.
 STEP = 22.9803 IN. XMP = .0000 IN.
 STEP = 16.3919 IN. ZMP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 0.000 T1 = 96.800 Q1 = 3.961 HREF = .049

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE HUA-Q

Z/3/ .1590 .2990 .3320 .7650 .9050

X/C
 .000 .2502 .3669 .6422 .7112
 .010 .0561 .0566 .0866 .1194
 .100 .0860 .0162 .0405 .0931
 .300 .0907 .0174 .0378 .1135
 .700 .0228 .0300 .0048 .0101
 .900 .0246 .0155 .0103

PARAMETRIC DATA

BETA = .000 FN/L = 3.720
 B.F.LAP = .000 ELEVON = .000
 HAWAHT = 1.000

MACH (1) = 8.000 ALPHA (2) = .000 T1 = 96.800 Q1 = 3.961 HREF = .049

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE HUA-Q

Z/3/ .1590 .2990 .3320 .7650 .9050

X/C
 .000 .2894 .2359 .4434 .4670
 .010 .0599 .0556 .0869 .1196
 .100 .0444 .0198 .0289 .0406
 .300 .0403 .0171 .0276 .0290
 .700 .0237 .0300 .0060 .0060
 .900 .0201 .0067 .0079

TABLED DATA LISTING FOR Q48 (AEDC VAS32)

DATE 23 SEP 74

(RTKV11) (25 APR 74)

AEDC VAS32 Q48 Q1 ORB. LEFT VERTICAL TAIL

PARAMETRIC DATA
 BETA = .000 RN/L = .000
 S.FLAP = .000 ELEVON = .000
 HAWAHT = 1.000

REFERENCE DATA

REF = .0230 33.57. 147P = .0000 IN.
 REF = 22.0003 IN. 147P = .0000 IN.
 REF = 16.3919 IN. 247P = .0000 IN.
 SCALE = .0175 SCALE

WACH (1) = 0.000 ALPHA (1) = -0.000 TI = 93.000 Q1 = .020 REF = .020

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MU/NO

Z/34 .1590 .2990 .3320 .7050 .9050

1/C
 .000 .0200 .3799 .0019 .7287
 .010 .0000 .0000 .0000 .0000
 .100 .0000 .0000 .0000 .0000
 .300 .0000 .0000 .0000 .0000
 .500 .0000 .0000 .0000 .0000
 .700 .0000 .0000 .0000 .0000
 .900 .0000 .0000 .0000 .0000

WACH (2) = 0.000 ALPHA (2) = .000 TI = 93.000 Q1 = .020 REF = .020

SECTION (2) LEFT VERTICAL TAIL DEPENDENT VARIABLE MU/NO

Z/34 .1590 .2990 .3320 .7050 .9050

1/C
 .000 .0203 .2354 .4756 .9143
 .010 .0000 .0000 .0000 .0000
 .100 .0000 .0000 .0000 .0000
 .300 .0000 .0000 .0000 .0000
 .500 .0000 .0000 .0000 .0000
 .700 .0000 .0000 .0000 .0000
 .900 .0000 .0000 .0000 .0000

DATE 23 SEP 74

TABULATED DATA LISTING FOR C-4B (AEDC VAS32)

PAGE 382

AEDC VAS32 C-4B Q1 ORB. LEFT VERTICAL TAIL (RTKV12) (23 APR 74)

REFERENCE DATA

WEP = .8234 80.71. HWP = .0000 IN.
 WEP = .8234 80.71. HWP = .0000 IN.
 WEP = .8234 80.71. HWP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .0000 IN/L = .500
 B.FLAP = .0000 ELEVON = .000
 MAX/HIT = 1.000

MACH (1) = 6.000 ALPHA (1) = 25.000 TI = 93.400 Q1 = .524 WEP = .018
 SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MU/MC

Z/AV .1550 .2990 .5320 .7650 .9050

X/C

.000 .0750 .0802 .0701 .0708
 .010 .0100 .0162 .0159 .0180 .0232
 .100 .0071 .0096 .0077 .0113
 .300 .0081 .0082 .0080 .0070
 .500 .0030 .0037 .0033 .0035
 .700 .0033 .0047 .0044

MACH (1) = 6.000 ALPHA (2) = 30.000 TI = 93.400 Q1 = .524 WEP = .018
 SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MU/MC

Z/AV .1550 .2990 .5320 .7650 .9050

X/C

.000 .0483 .0327 .0376 .0233
 .010 .0152 .0119 .0147 .0173
 .100 .0059 .0055 .0067 .0120
 .300 .0043 .0087 .0086 .0074
 .500 .0021 .0014 .0028 .0041
 .700 .0016 .0031 .0047

MACH (1) = 6.000 ALPHA (3) = 35.000 TI = 93.400 Q1 = .524 WEP = .018
 SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MU/MC

Z/AV .1550 .2990 .5320 .7650 .9050

X/C

.000 .0409 .0314 .0516 .0456
 .010 .0132 .0098 .0119 .0212
 .100 .0041 .0033 .0093 .0146
 .300 .0013 .0013 .0019 .0121
 .500 .0008 .0017 .0019 .0056
 .700 .0026 .0027 .0066

DATE 23 SEP 74

TABULATED DATA LISTING FOR Q4B (AEDC VA352)

PAGE 363

AEDC VA352 Q4B Q1 Q2B. LEFT VERTICAL TAIL (RTKV13) (25 APR 74)

REFERENCE DATA

STEP = .0236 SQ.FT. WTP = .0000 IN.
 STEP = 22.9803 IN. WTP = .0000 IN.
 STEP = 16.3919 IN. WTP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.000
 S.FLAP = .000 ELEVON = .000
 HAW/MT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.100 Q1 = 1.003 WREF = .029

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE HU40

Z/AV .1590 .2990 .5320 .7650 .9050

X/C

.000 .0367 .0298 .0319 .0215
 .010 .0140 .0126 .0139 .0146
 .100 .0065 .0083 .0097 .0141
 .300 .0042 .0061 .0134 .0111
 .500 .0019 .0014 .0033 .0056
 .700 .0029 .0034 .0069

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.100 Q1 = 1.003 WREF = .029

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE HU40

Z/AV .1590 .2990 .5320 .7650 .9050

X/C

.000 .0372 .0339 .0626 .0479
 .010 .0141 .0124 .0146 .0263
 .100 .0067 .0079 .0109 .0252
 .300 .0019 .0014 .0044 .0091
 .500 .0016 .0020 .0027 .0112
 .700 .0029 .0038 .0059 .0139

MACH (1) = 8.000 ALPHA (3) = 40.000 TI = 94.100 Q1 = 1.003 WREF = .029

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE HU40

Z/AV .1590 .2990 .5320 .7650 .9050

X/C

.000 .0169 .0191 .0447 .0690
 .010 .0122 .0050 .0076 .0173
 .100 .0067 .0029 .0033 .0109
 .300 .0024 .0024 .0026 .0076
 .500 .0022 .0015 .0019 .0041
 .700 .0035 .0049 .0061

(RTN14) (23 APR 74)

AEDC VAS32 0448 01 ORG. LEFT VERTICAL TAIL

REFERENCE DATA

REF = .0238 83.87, 240P = .0000 IN.
 LREF = 22.5803 IN, 240P = .0000 IN.
 SREF = 16.3919 IN, 240P = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 0.000 ALPHA (1) = 30.000 T1 = 99.950 Q1 = 1.994 MREF = .035

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MU/AD

Z/AV .1590 .2590 .3320 .7690 .9050

X/C
 .000 .0194 .0174 .0301 .0415
 .010 .0131 .0082 .0064 .0165
 .100 .0073 .0052 .0039 .0117
 .300 .0045 .0029 .0107 .0125
 .500 .0025 .0019 .0036 .0070
 .700 .0019 .0016 .0046 .0094
 .900

MACH (1) = 0.000 ALPHA (2) = 35.000 T1 = 99.950 Q1 = 1.994 MREF = .035

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MU/AD

Z/AV .1590 .2590 .3320 .7690 .9050

X/C
 .000 .0307 .0464 .0767 .0815
 .010 .0139 .0087 .0280 .0212
 .100 .0089 .0045 .0169 .0244
 .300 .0023 .0191 .0263 .0136
 .500 .0016 .0019 .0083 .0107
 .700 .0030 .0083 .0106
 .900

PARAMETRIC DATA

BETA = .000 RV/L = 8.000
 SFLAP = .000 ELEVON = .000
 HAWAHT = 1.000



DATE 23 SEP 74

TABULATED DATA LISTING FOR OM8 (AEDC VAS32)

PAGE 349

AEDC VAS32 OM8 Q1 OM8 LEFT VERTICAL TAIL (RTMVIS) (25 APR 74)

REFERENCE DATA

REF = .0230 30.0% XREF = .0000 IN.
REF = 22.3653 IN. XREF = .0000 IN.
REF = 16.3313 IN. XREF = .0000 IN.
SCALE = 0.175 SCALE

PARAMETRIC DATA

BETA = .000 RV/L = 3.780
S.F.LAP = .000 ELEVON = .000
HAW/MT = 1.000

MACH (1) = 6.000 ALPHA (1) = 25.000 Y1 = 97.687 Q1 = 3.995 HREF = .049

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MUAD

Z/AV .1590 .2990 .5320 .7650 .9050

1/C
.000 .1375 .0741 .0778 .1349
.010 .0174 .0139 .0173 .0311
.020 .0048 .0046 .0129 .0208
.030 .0089 .0116 .0159 .0207
.040 .0029 .0044 .0054 .0070
.050 .0047 .0071 .0074 .0074

MACH (1) = 6.000 ALPHA (2) = 10.000 Y1 = 97.687 Q1 = 3.995 HREF = .049

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MUAD

Z/AV .1590 .2990 .5320 .7650 .9050

1/C
.000 .0209 .0367 .0667 .0727
.010 .0133 .0104 .0231 .0269
.020 .0079 .0054 .0163 .0260
.030 .0049 .0053 .0133 .0241
.040 .0031 .0029 .0046 .0102
.050 .0016 .0037 .0066 .0098

MACH (1) = 6.000 ALPHA (3) = 35.000 Y1 = 97.687 Q1 = 3.995 HREF = .049

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MUAD

Z/AV .1590 .2990 .5320 .7650 .9050

1/C
.000 .0240 .0455 .0432 .0889
.010 .0190 .0081 .0201 .0318
.020 .0070 .0043 .0190 .0241
.030 .0024 .0024 .0194 .0213
.040 .0019 .0010 .0064 .0197
.050 .0039 .0018 .0018 .0018

TABULATED DATA LISTING FOR OH4B (AEDC VA352)

DATE 23 SEP 74

(RTN17) (25 APR 74)

AEDC VA352 OH4B Q1 ORB. LEFT VERTICAL TAIL

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
S,FLAP = 10.000 ELEVON = 5.000
HAW/HT = 1.000

REFERENCE DATA

REF = .0238 SQ.FT. XMRP = .0000 IN.
LREF = 28.5803 IN. YMRP = .0000 IN.
BREF = 18.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.700 Q1 = 3.949 HREF = .049

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE HJ/HO

Z/8V .1590 .2990 .5320 .7650 .9050

X/C

.000 .0203 .0352 .0640 .0725
.010 .0137 .0066 .0224 .0264
.300 .0080 .0054 .0174 .0254
.500 .0032 .0052 .0083 .0239
.700 .0032 .0027 .0047 .0101
.900 .0034 .0036 .0103

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.700 Q1 = 3.949 HREF = .049

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE HJ/HO

Z/8V .1590 .2990 .5320 .7650 .9050

X/C

.000 .0231 .0449 .0629 .0689
.010 .0147 .0096 .0204 .0319
.300 .0073 .0079 .0186 .0283
.500 .0016 .0056 .0196 .0214
.700 .0016 .0023 .0085 .0088
.900 .0040 .0093 .0096

DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VAS32)

PAGE 507

AEDC VAS32 OMB 01 ORB, LEFT VERTICAL TAIL (RTKV18) (25 APR 74)

REFERENCE DATA

WREF = .0238 SQ.FT. XREF = .0000 IN.
 YREF = 22.5803 IN. YREF = .0000 IN.
 ZREF = 18.3919 IN. ZREF = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RVAL = 3.720
 B.FLAP = 10.000 ELEVON = 5.000
 HAW/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.200 QI = 3.933 WREF = .049

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MU/MD

Z/8V .1590 .2990 .5320 .7650 .9050

X/C

.000 .0136 .0617 .0830 .0881
 .010 .0127 .0411 .0462 .0417
 .100 .0082 .0324 .0602 .0372
 .300 .0369 .0432 .0307 .0225
 .500 .0044 .0143 .0124 .0273
 .700 .0126 .0141 .0198

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.200 QI = 3.933 WREF = .049

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MU/MD

Z/8V .1590 .2990 .5320 .7650 .9050

X/C

.000 .0217 .0408 .0980 .1035
 .010 .0192 .0132 .0366 .0345
 .100 .0070 .0091 .0345 .0249
 .300 .0081 .0290 .0213 .0178
 .500 .0017 .0037 .0078 .0093
 .700 .0048 .0080 .0098

DATE 23 SEP 74

TABULATED DATA LISTING FOR OH48 (AEDC VA352)

PAGE 368

AEDC VA352 OH48 01 068, LEFT VERTICAL TAIL (RTK/19) (23 APR 74)

REFERENCE DATA

STEP = .8238 SQ.FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. XMRP = .0000 IN.
 EREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0195 SCALE

PARAMETRIC DATA

BETA = -5.000 RV/L = 2.000
 B,FLAP = 10.000 ELEVON = 5.000
 HAWAHT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.850 Q1 = 1.983 HREF = .035

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV .1590 .2990 .5320 .7650 .9080

X/C
 .000 .0207 .0354 .0743 .1242
 .010 .0195 .0068 .0277 .0309
 .100 .0079 .0079 .0460 .0193
 .300 .0079 .0068 .0348 .0288
 .500 .0028 .0035 .0119 .0135
 .700 .0036 .0143 .0128
 .900

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.850 Q1 = 1.983 HREF = .035

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV .1590 .2990 .5320 .7650 .9080

X/C
 .000 .0141 .0375 .0288 .0194
 .010 .0116 .0155 .0375 .0292
 .100 .0047 .0076 .0454 .0311
 .300 .0116 .0363 .0212 .0204
 .500 .0019 .0084 .0113 .0101
 .700 .0080 .0120 .0106
 .900



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VAS32)

PAGE 389

AEDC VAS32 OMB Q1 ORB, LEFT VERTICAL TAIL (RTNVED) (23 APR 74)

REFERENCE DATA

REF = .0238 SQ.FT. XREF = .0000 IN.
 REF = 22.5803 IN. YREF = .0000 IN.
 REF = 18.3819 IN. ZREF = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
 S.FLAP = 10.000 ELEVON = 5.000
 HAWAHT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.900 Q1 = 1.900 HREF = .035

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MU/HO

Z/SV .1590 .2990 .5320 .7650 .9080

X/C
 .000 .0172 .0181 .0309 .0419
 .010 .0142 .0081 .0068 .0138
 .100 .0076 .0086 .0070 .0121
 .300 .0042 .0079 .0119 .0118
 .500 .0024 .0019 .0034 .0081
 .700 .0019 .0019 .0046 .0089
 .900

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.900 Q1 = 1.900 HREF = .035

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MU/HO

Z/SV .1590 .2990 .5320 .7650 .9080

X/C
 .000 .0307 .0472 .0791 .0640
 .010 .0139 .0066 .0259 .0240
 .100 .0071 .0046 .0193 .0241
 .300 .0027 .0199 .0255 .0139
 .500 .0013 .0018 .0059 .0109
 .700 .0029 .0054 .0104 .0104
 .900

DATE 23 SEP 74

TABULATED DATA LISTING FOR OHB (AEDC VA352)

PAGE 370

AEDC VA352 OHB 01 ORB LEFT VERTICAL TAIL (RTN21) (25 APR 74)

REFERENCE DATA

STEP = .8236 SQ.FT. XMRP = .0000 IN.
 STEP = 22.9803 IN. YMRP = .0000 IN.
 STEP = 14.3519 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -6.000 RN/L = .500
 B.F.L. = 10.000 ELEVON = 9.000
 HAWK = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 91.990 QI = .518 MREF = .017

SECTION (1) LEFT VERTICAL TAIL

DEPENDENT VARIABLE MU/DO

Z/8V .1590 .2990 .5320 .7650 .9050

X/C

.000 .0296 .0131 .0627 .0797
 .010 .0147 .0096 .0126 .0335
 .100 .0091 .0069 .0081 .0204
 .300 .0070 .0067 .0144 .0139
 .500 .0023 .0029 .0057 .0081
 .700 .0040 .0064 .0096

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 91.990 QI = .518 MREF = .017

SECTION (1) LEFT VERTICAL TAIL

DEPENDENT VARIABLE MU/DO

Z/8V .1590 .2990 .5320 .7650 .9050

X/C

.000 .0082 .0483 .0465 .0408
 .010 .0066 .0000 .0421 .0286
 .100 .0096 .0082 .0255 .0222
 .300 .0137 .0220 .0224 .0122
 .500 .0038 .0099 .0121
 .700 .0048 .0125 .0123
 .900



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VAS32)

PAGE 371

AEDC VAS32 OMB O1 ORG. LEFT VERTICAL TAIL (RTN22) (25 APR 74)

REFERENCE DATA

REF = .8238 SQ.FT. XREF = .0000 IN.
 LREF = 22.3903 IN. YREF = .0000 IN.
 SREF = 16.3919 IN. ZREF = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
 B.FLAP = 10.000 ELEVON = 5.000
 HAWAHT = 1.000

MACH (1) = 6.000 ALPHA (1) = 30.000 TI = 93.400 QI = .523 HREF = .016

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MU/40

Z/BV .1590 .2990 .5320 .7650 .9050

X/C

.000 .0821 .0394 .0445 .0310
 .010 .0150 .0000 .0142 .0170
 .100 .0064 .0061 .0089 .0118
 .500 .0050 .0070 .0088 .0077
 .700 .0021 .0023 .0032 .0045
 .900 .0020 .0040 .0053

MACH (1) = 6.000 ALPHA (2) = 35.000 TI = 93.400 QI = .523 HREF = .016

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MU/40

Z/BV .1590 .2990 .5320 .7650 .9050

X/C

.000 .0443 .0314 .0530 .0408
 .010 .0139 .0000 .0126 .0200
 .100 .0057 .0042 .0081 .0158
 .500 .0022 .0028 .0128 .0136
 .700 .0015 .0015 .0020 .0085
 .900 .0028 .0029 .0073

DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA352)

PAGE 372

AEDC VA352 OMB O1 ORB. LEFT VERTICAL TAIL (RTKV23) (25 APR 74)

REFERENCE DATA

STEP = .0236 SQ.FT. 1MRP = .0000 IN.
 STEP = 22.5803 IN. 4MRP = .0000 IN.
 STEP = 18.3919 IN. 2MRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
 S.FLAP = 10.000 ELEVON = 10.000
 HAWA/T = 1.000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.433 Q1 = .521 HREF = .018

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE HJ/AO

Z/8V .1590 .2990 .5320 .7650 .9050

X/C

.000 .0783 .0838 .0748 .0741
 .010 .010 .010 .0213
 .100 .0160 .0144 .0175 .0209
 .300 .0072 .0081 .0078 .0111
 .500 .0080 .0087 .0072 .0085
 .700 .0028 .0031 .0034 .0038
 .900 .0034 .0046 .0044

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.433 Q1 = .521 HREF = .018

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE HJ/AO

Z/8V .1590 .2990 .5320 .7650 .9050

X/C

.000 .0534 .0382 .0437 .0307
 .010 .010 .010 .0155
 .100 .0143 .0130 .0148 .0177
 .300 .0083 .0084 .0086 .0122
 .500 .0043 .0073 .0087 .0077
 .700 .0020 .0021 .0029 .0042
 .900 .0015 .0042 .0049

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.433 Q1 = .521 HREF = .018

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE HJ/AO

Z/8V .1590 .2990 .5320 .7650 .9050

X/C

.000 .0440 .0330 .0837 .0478
 .010 .010 .010 .0223
 .100 .0140 .0110 .0118 .0211
 .300 .0053 .0044 .0073 .0160
 .500 .0027 .0054 .0124 .0128
 .700 .0019 .0017 .0080
 .900 .0033 .0035 .0070



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA352)

PAGE 373

AEDC VA352 OMB 01 ORB, LEFT VERTICAL TAIL (RTKV24) (25 APR 74)

REFERENCE DATA

REF = .0238 SJ.FT. XREF = .0000 IN.
 LREF = 22.5803 IN. YREF = .0000 IN.
 SREF = 16.3919 IN. ZREF = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -8.000 RM/L = .900
 S.FLAP = 10.000 ELEVON = 10.000
 HAWAHT = 1.000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MU/MO

Z/8V .1590 .2990 .5320 .7650 .9050

X/C

.000 .0676 .0393 .0343 .0704
 .010 .0130 .0114 .0092 .0260
 .300 .0072 .0060 .0065 .0163
 .500 .0069 .0074 .0097 .0155
 .700 .0043 .0028 .0038 .0061
 .900 .0038 .0032 .0070

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MU/MO

Z/8V .1590 .2990 .5320 .7650 .9050

X/C

.000 .0312 .0130 .0482 .0741
 .010 .0152 .0032 .0110 .0316
 .300 .0087 .0077 .0073 .0191
 .500 .0062 .0061 .0141 .0131
 .700 .0024 .0034 .0056 .0079
 .900 .0037 .0032 .0091

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MU/MO

Z/8V .1590 .2990 .5320 .7650 .9050

X/C

.000 .0100 .0463 .0491 .0401
 .010 .0090 .0095 .0402 .0327
 .300 .0082 .0085 .0208 .0219
 .500 .0131 .0131 .0217 .0236
 .700 .0012 .0045 .0092 .0121
 .900 .0047 .0122 .0115

TABULATED DATA LISTING FOR C-4B (AEDC VA332)

DATE 23 SEP 74

(RTN/25) (23 APR 74)

AEDC VA332 C-4B 01 ORB. LEFT VERTICAL TAIL

PARAMETRIC DATA

BETA = .000 TW/Λ = 2.000
 S.F.LAP = 10.000 ELEVON = 10.000
 HAW/MT = 1.000

REFERENCE DATA

BREF = .0236 SQ.FT. XMRP = .0000 IN.
 LREF = 22.5003 IN. YMRP = .0000 IN.
 BREF = 16.3319 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.850 QI = 1.965 WREF = .035

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MU/MD

Z/AV .1590 .2990 .5320 .7650 .9050

X/C
 .000 .0177 .0180 .0315 .0413
 .010 .0139 .0080 .0094 .0155
 .100 .0077 .0054 .0059 .0121
 .300 .0046 .0073 .0114 .0117
 .500 .0026 .0015 .0034 .0072
 .700 .0016 .0046 .0083
 .900

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.850 QI = 1.965 WREF = .035

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MU/MD

Z/AV .1590 .2990 .5320 .7650 .9050

X/C
 .000 .0303 .0475 .0789 .0835
 .010 .0140 .0087 .0280 .0229
 .100 .0089 .0045 .0194 .0234
 .300 .0026 .0198 .0262 .0136
 .500 .0017 .0014 .0058 .0111
 .700 .0026 .0050 .0109
 .900

DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VAS32)

PAGE 373

AEDC VAS32 OMB 01 ORB LEFT VERTICAL TAIL (RTK28) (25 APR 74)

REFERENCE DATA

STEP = .0238 30 FT. XMRP = .0000 IN.
 STEP = 22.1903 IN. XMRP = .0000 IN.
 STEP = 18.3319 IN. XMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -8,000 IN/L = 2,000
 8, FLAP = 10,000 ELEVON = 10,000
 MAUNT = 1,000

MACH (1) = 8,000 ALPHA (1) = 30,000 TI = 99,450 QI = 1,983 HREF = .035

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MUHO

Z/AV .1590 .2990 .5320 .7650 .9050

K/C

.000 .0213 .0336 .0760 .1246
 .010 .0372
 .100 .0194 .0091 .0266 .0311
 .300 .0081 .0077 .0463 .0208
 .500 .0064 .0354 .0273 .0090
 .700 .0021 .0024 .1125 .0134
 .900 .0035 .0142 .0125

MACH (1) = 8,000 ALPHA (2) = 35,000 TI = 99,450 QI = 1,983 HREF = .035

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MUHO

Z/AV .1590 .2990 .5320 .7650 .9050

K/C

.000 .0146 .0377 .0262 .0187
 .010 .0227
 .100 .0107 .0147 .0360 .0297
 .300 .0049 .0094 .0446 .0350
 .500 .0111 .0366 .0214 .0204
 .700 .0019 .0085 .0114 .0098
 .900 .0049 .0112 .0103

DATE 23 SEP 74

TABULATED DATA LISTING FOR OM-8 (AEDC VAS32)

PAGE 376

AEDC VAS32 OM-8 Q1 ORB. LEFT VERTICAL TAIL (RTN027) (23 APR 74)

REFERENCE DATA

REF = .0238 80.0 FT. XMRP = .0000 IN.
 REF = 22.5003 IN. YMRP = .0000 IN.
 REF = 10.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 0.000 ALPHA (1) = 25.000 TI = 97.387 Q1 = 3.936 HREF = .049

SECTION (1) LEFT VERTICAL TAIL

DEPENDENT VARIABLE MU/DO

Z/DO .1590 .2990 .5320 .7650 .9050

X/C

.000 .1350 .0897 .0730 .1336
 .010 .0177 .0135 .0168 .0311
 .100 .0049 .0082 .0128 .0208
 .300 .0084 .0120 .0154 .0216
 .500 .0030 .0042 .0052 .0072
 .700 .0043 .0066 .0087

MACH (1) = 0.000 ALPHA (2) = 30.000 TI = 97.387 Q1 = 3.936 HREF = .049

SECTION (1) LEFT VERTICAL TAIL

DEPENDENT VARIABLE MU/DO

Z/DO .1590 .2990 .5320 .7650 .9050

X/C

.000 .0804 .0363 .0841 .0719
 .010 .0140 .0081 .0238 .0281
 .100 .0042 .0054 .0193 .0281
 .300 .0056 .0135 .0237 .0168
 .500 .0029 .0027 .0050 .0058
 .700 .0036 .0287 .0099

MACH (1) = 0.000 ALPHA (3) = 35.000 TI = 97.387 Q1 = 3.936 HREF = .049

SECTION (1) LEFT VERTICAL TAIL

DEPENDENT VARIABLE MU/DO

Z/DO .1590 .2990 .5320 .7650 .9050

X/C

.000 .0236 .0444 .0627 .0893
 .010 .0147 .0090 .0198 .0324
 .100 .0087 .0079 .0183 .0265
 .300 .0066 .0169 .0213 .0173
 .500 .0018 .0030 .0068 .0089
 .700 .0044 .0099 .0102

PARAMETRIC DATA

BETA = .000 RW/L = 3.720
 S.F.LAP = 10.000 ELEVON = 10.000
 MU/DO/TI = 1.000

TABULATED DATA LISTING FOR OMB (AEDC VA352)

AEDC VA352 OMB Q1 ORG. LEFT VERTICAL TAIL (RTN28) (23 APR 74)

REFERENCE DATA
 REF = .0236 0.1 FT. WHP = .0000 IN.
 REF = 22.5003 IN. WHP = .0000 IN.
 REF = 16.3919 IN. WHP = .0000 IN.
 SCALE = .0195 SCALE
 PARAMETRIC DATA
 BETA = -8.000 IN/L = 3.720
 S.F.LAP = 10.000 ELEVON = 10.000
 MAX/MT = 1.000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.300 Q1 = 3.930 WEP = .049

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MU/NO

Z/NO .1990 .2990 .3320 .7650 .9050

X/C
 .000 .0136 .0896 .0859 .0441
 .010 .0082 .0084 .0406 .0341
 .100 .0080 .0094 .0373 .0210
 .300 .0131 .0421 .0299 .0113
 .500 .0037 .0065 .0143 .0139
 .700 .0096 .0150 .0148

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.300 Q1 = 3.930 WEP = .049

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MU/NO

Z/NO .1990 .2990 .3320 .7650 .9050

X/C
 .000 .0206 .0586 .1466 .0973
 .010 .0146 .0182 .0443 .0461
 .100 .0073 .0201 .0447 .0326
 .300 .0186 .0351 .0307 .0185
 .500 .0022 .0051 .0114 .0130
 .700 .0043 .0155 .0133

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.300 Q1 = 3.930 WEP = .049

SECTION (1) LEFT VERTICAL TAIL DEPENDENT VARIABLE MU/NO

Z/NO .1990 .2990 .3320 .7650 .9050

X/C
 .000 .0203 .0400 .0273 .0203
 .010 .0139 .0274 .0459 .0302
 .100 .0081 .0201 .0391 .0346
 .300 .0160 .0317 .0282 .0208
 .500 .0020 .0051 .0100 .0106
 .700 .0051 .0116 .0109

DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VAS352)

PAGE 378

AEDC VAS352 OMB OR OMB. LEFT MAIN NOZZLE

(RTN29) (25 APR 74)

REFERENCE DATA

REF = .0238 50. FT. HUP = .0000 IN.
 REF = 22.5803 IN. HUP = .0000 IN.
 REF = 16.3919 IN. HUP = .0000 IN.
 SCALE = .0193 SCALE

PARAMETRIC DATA

BETA = .000 IN/L = 3.780
 SFLAP = .000 ELEVON = .000
 MAWHT = 1.000

MACH (1) = 0.000 ALPHA (1) = 27.000 TI = 97.087 Q1 = 3.940 WEF = .049
 MACH (2) = 0.000 ALPHA (2) = 30.000 TI = 97.087 Q1 = 3.940 WEF = .049

SECTION (1) NOZZLE

DEPENDENT VARIABLE MUAD

X .0680 .1750 .2830 .4380 .7680

P-MIN

.000 .0161 .0257 .0161 .0082
 25.000 .0130 .0392
 45.000 .0119 .0121 .0120 .0145 .0142
 65.000 .0456 .0390 .0360
 90.000 .0292 .0276 .0297 .0319
 135.000 .0174
 315.000 .0116

MACH (1) = 0.000 ALPHA (1) = 30.000 TI = 97.087 Q1 = 3.940 WEF = .049
 MACH (2) = 0.000 ALPHA (2) = 30.000 TI = 97.087 Q1 = 3.940 WEF = .049

SECTION (1) NOZZLE

DEPENDENT VARIABLE MUAD

X .0680 .1750 .2830 .4380 .7680

P-MIN

.000 .0388 .0694 .0392 .0109
 25.000 .0469 .0721
 45.000 .0143 .0133 .0116 .0121 .0240
 65.000 .0291 .0267 .0457
 90.000 .0311 .0277 .0298 .0254
 135.000 .0245
 315.000 .0310

MACH (1) = 0.000 ALPHA (1) = 35.000 TI = 97.087 Q1 = 3.940 WEF = .049
 MACH (2) = 0.000 ALPHA (2) = 35.000 TI = 97.087 Q1 = 3.940 WEF = .049

SECTION (1) NOZZLE

DEPENDENT VARIABLE MUAD

X .0680 .1750 .2830 .4380 .7680

P-MIN

.000 .0618 .0796 .0728 .0217
 25.000 .0618 .0764
 45.000 .0282 .0233 .0161 .0136 .0342
 65.000 .0377 .0350 .0428
 90.000 .0403 .0416 .0468 .0444
 135.000 .0277
 315.000 .0416

DATE 23 SEP 74

TABULATED DATA LISTING FOR OH4B (AEDC VA352)

PAGE 378

AEDC VA352 OH4B 02 ORB, LEFT MAIN NOZZLE

(RTN30) (23 APR 74)

REFERENCE DATA

SHRP = .8236 30. FT. SHRP = .0000 IN.
 LREF = 22.9803 IN. SHRP = .0000 IN.
 BREF = 16.3919 IN. SHRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
 S.F.LAP = .000 ELEVON = .000
 HAWAHT = 1.000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 94.933 QI = 1.986 HREF = .035

SECTION (1) NOZZLE DEPENDENT VARIABLE HU/HD

X .0860 .1750 .2630 .4360 .7660

PHIN

.000 .0782 .0146 .0092 .0039
 25.000 .0092 .0178
 45.000 .0047 .0049 .0046 .0051 .0056
 65.000 .0100 .0097 .0110
 90.000 .0123 .0131 .0132 .0146
 135.000 .0123
 315.000 .0060

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 94.933 QI = 1.986 HREF = .035

SECTION (1) NOZZLE DEPENDENT VARIABLE HU/HD

X .0860 .1750 .2630 .4360 .7660

PHIN

.000 .0237 .0356 .0230 .0072
 25.000 .0293 .0459
 45.000 .0085 .0077 .0062 .0048 .0064
 65.000 .0118 .0114 .0097
 90.000 .0163 .0149 .0137 .0124
 135.000 .0024
 315.000 .0156

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 94.933 QI = 1.986 HREF = .035

SECTION (1) NOZZLE DEPENDENT VARIABLE HU/HD

X .0860 .1750 .2630 .4360 .7660

PHIN

.000 .0464 .0654 .0463 .0132
 25.000 .0373 .0727
 45.000 .0179 .0156 .0114 .0079 .0106
 65.000 .0256 .0264 .0264
 90.000 .0324 .0304 .0303 .0297
 135.000 .0022
 315.000 .0341

(RTN31) (25 APR 74)

AEDC VA352 OMB 02 ORB. LEFT MAIN NOZZLE

REFERENCE DATA

SECT = .8238 34. FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. XMRP = .0000 IN.
 BREF = 16.3919 IN. XMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 0.000 ALPHA (1) = 25.000 TI = 92.933 QI = .523 HREF = .018

SECTION (1) NOZZLE

DEPENDENT VARIABLE HU/HO

| X | .0860 | .1750 | .2630 | .4380 | .7880 |
|---------|-------|-------|-------|-------|-------|
| PHIN | .000 | .0043 | .0086 | .0047 | .0019 |
| 25.000 | .0044 | .0086 | | | |
| 45.000 | .0013 | .0014 | .0012 | .0010 | .0010 |
| 65.000 | .0030 | .0016 | .0019 | | |
| 90.000 | .0031 | .0036 | .0036 | .0042 | |
| 135.000 | .0093 | | | | |
| 315.000 | .0024 | | | | |

MACH (1) = 0.000 ALPHA (2) = 30.000 TI = 92.933 QI = .523 HREF = .018

SECTION (1) NOZZLE

DEPENDENT VARIABLE HU/HO

| X | .0860 | .1750 | .2630 | .4380 | .7880 |
|---------|-------|-------|-------|-------|-------|
| PHIN | .000 | .0069 | .0145 | .0100 | .0041 |
| 25.000 | .0104 | .0132 | | | |
| 45.000 | .0031 | .0031 | .0016 | .0016 | .0016 |
| 65.000 | .0034 | .0025 | .0028 | | |
| 90.000 | .0045 | .0044 | .0046 | .0049 | |
| 135.000 | .0016 | | | | |
| 315.000 | .0057 | | | | |

MACH (1) = 0.000 ALPHA (3) = 35.000 TI = 92.933 QI = .523 HREF = .018

SECTION (1) NOZZLE

DEPENDENT VARIABLE HU/HO

| X | .0860 | .1750 | .2630 | .4380 | .7880 |
|---------|-------|-------|-------|-------|-------|
| PHIN | .000 | .0166 | .0260 | .0178 | .0081 |
| 25.000 | .0229 | .0332 | | | |
| 45.000 | .0059 | .0051 | .0035 | .0030 | .0025 |
| 65.000 | .0032 | .0037 | .0043 | | |
| 90.000 | .0070 | .0073 | .0074 | .0075 | |
| 135.000 | .0024 | | | | |
| 315.000 | .0126 | | | | |

PARAMETRIC DATA

BETA = .000 RN/L = .500
 B.FLAP = .000 ELEVON = .000
 HAWKHT = 1.000

DATE 23 SEP 74

TABULATED DATA LISTING FOR OM-B (AEDC V4352)

(RTWASE) (29 APR 74)

AEDC V4352 OM-B OR ORB. LEFT MAIN NOZZLE

REFERENCE DATA
 SREF = .0233 90.FT. XMRP = .0000 IN.
 JREF = 22.9603 IN. YMRP = .0000 IN.
 ZREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE
 BETA = .000 RN/L = 1.000
 B.FLAP = .000 ELEVON = .000
 HAW/HT = 1.000

PARAMETRIC DATA

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 93.400 Q1 = 1.000 HREF = .024

SECTION (1) NOZZLE DEPENDENT VARIABLE MU/MO

X .0880 .1750 .2630 .4380 .7880

PHIN
 .000 .0125 .0171 .0120 .0037
 25.000 .0159 .0206
 45.000 .0037 .0025 .0015 .0024
 65.000 .0024 .0027 .0027 .0027
 90.000 .0064 .0068 .0069 .0061
 135.000 .0014
 315.000 .0083

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 93.400 Q1 = 1.000 HREF = .024

SECTION (1) NOZZLE DEPENDENT VARIABLE MU/MO

X .0880 .1750 .2630 .4380 .7880

PHIN
 .000 .0246 .0296 .0236 .0075
 25.000 .0291 .0279
 45.000 .0066 .0073 .0061 .0035 .0031
 65.000 .0060 .0069 .0064
 90.000 .0143 .0147 .0143 .0122
 135.000 .0016
 315.000 .0176

MACH (1) = 8.000 ALPHA (3) = 45.000 TI = 93.400 Q1 = 1.000 HREF = .024

SECTION (1) NOZZLE DEPENDENT VARIABLE MU/MO

X .0880 .1750 .2630 .4380 .7880

PHIN
 .000 .0443 .0877 .0394 .0172
 25.000 .0708 .0640
 45.000 .0165 .0137 .0136 .0078 .0089
 65.000 .0182 .0191 .0203
 90.000 .0426 .0434 .0460 .0466
 135.000 .0059
 315.000 .0365

DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VAS52)

PAGE 362

AEDC VAS52 OMB 02 ORB. LEFT MAIN NOZZLE

(RTN33) (25 APR 74)

REFERENCE DATA

STEP = .0238 SQ.FT. YMRP = .0000 IN.
 LREF = 22.5903 IN. YMRP = .0000 IN.
 STEP = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

ZETA = .000 IN/L = 1.250
 FLAP = .000 ELEVON = .000
 HZ/MT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.250 QI = 1.253 HREF = .027

SECTION (1) NOZZLE DEPENDENT VARIABLE MU/MD

X .0860 .1750 .2630 .4360 .7860

PHIN

.000 .0155 .0208 .0144 .0051
 25.000 .0196 .0231
 45.000 .0083 .0081 .0037 .0025 .0031
 65.000 .0036 .0037 .0038
 90.000 .0060 .0079 .0074 .0064
 135.000 .0016
 315.000 .0109

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.250 QI = 1.253 HREF = .027

SECTION (1) NOZZLE DEPENDENT VARIABLE MU/MD

X .0860 .1750 .2630 .4360 .7860

PHIN

.000 .0272 .0334 .0278 .0066
 25.000 .0325 .0311
 45.000 .0105 .0091 .0085 .0042 .0040
 65.000 .0073 .0060 .0091
 90.000 .0189 .0186 .0183 .0162
 135.000 .0019
 315.000 .0167

DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-8 (AEDC VAS32)

PAGE 383

AEDC VAS32 OH-8 02 ORB. LEFT MAIN NOZZLE

(HTN34) (25 APR 74)

REFERENCE DATA

STEP = .8238 SQ.FT. XMRP = .0000 IN.
 LREP = 22.9003 IN. YMRP = .0000 IN.
 BREP = 18.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RW/L = 1.500
 B.FLAP = .000 ELEVON = .000
 HAW/HT = 1.000

MACH (1) = 0.000 ALPHA (1) = 30.000 TI = 94.900 QI = 1.934 HREF = .030

SECTION (1) NOZZLE DEPENDENT VARIABLE MU/MD

X .0880 .1750 .2630 .4380 .7880

PHIN

.000 .0182 .0234 .0187 .0057
 25.000 .0213 .0281
 45.000 .0087 .0095 .0045 .0028 .0034
 65.000 .0055 .0055 .0080
 90.000 .0114 .0109 .0098 .0081
 135.000 .0019
 315.000 .0124

MACH (1) = 0.000 ALPHA (2) = 35.000 TI = 94.900 QI = 1.934 HREF = .030

SECTION (1) NOZZLE DEPENDENT VARIABLE MU/MD

X .0880 .1750 .2630 .4380 .7880

PHIN

.000 .0323 .0410 .0322 .0101
 25.000 .0378 .0434
 45.000 .0125 .0110 .0081 .0052 .0052
 65.000 .0130 .0124 .0137
 90.000 .0253 .0243 .0228 .0209
 135.000 .0022
 315.000 .0218

DATE 23 SEP 74 TABULATED DATA LISTING FOR OH4B (AEDC VA352)

(RTKN35) (25 APR 74)

AEDC VA352 OH4B 02 ORB. LEFT MAIN NOZZLE

PARAMETRIC DATA

BETA = .000 IN/L = 1.750
 B.F.LAP = .000 ELEVON = .000
 HAWKING = 1.000

REFERENCE DATA

STEP = .8238 32.4 FT. XMRP = .0000 IN.
 STEP = 22.5803 IN. XMRP = .0000 IN.
 STEP = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.200 QI = 1.797 HEP = .033

SECTION (1) NOZZLE DEPENDENT VARIABLE HU/HG

X .0680 .1750 .2830 .4380 .7880

PHIN
 .000 .0203 .0286 .0200 .0080
 25.000 .0257 .0364
 45.000 .0069 .0083 .0037 .0048
 65.000 .0085 .0083 .0070
 90.000 .0146 .0131 .0124 .0111
 135.000 .0022
 215.000 .0139

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.200 QI = 1.797 HEP = .033

SECTION (1) NOZZLE DEPENDENT VARIABLE HU/HG

X .0680 .1750 .2830 .4380 .7880

PHIN
 .000 .0395 .0631 .0389 .0106
 25.000 .0477 .0800
 45.000 .0171 .0139 .0096 .0084 .0073
 65.000 .0195 .0194 .0203
 90.000 .0285 .0275 .0264 .0255
 135.000 .0024
 215.000 .0277



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA352)

PAGE 385

AEDC VA352 OMB OR ORB, LEFT MAIN NOZZLE

(RTN36) (23 APR 74)

REFERENCE DATA

SEP = .8238 SQ.FT. XMRP = .0000 IN.
 -EP = 22.9003 IN. YMRP = .0000 IN.
 SEP = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RVAL = 2.000
 B.FLAP = .000 ELEVON = .000
 HAWAHT = 1.000

MACH (1) = 6.000 ALPHA (1) = 30.000 TI = 94.987 QI = 1.984 HREF = .035

DEPENDENT VARIABLE MU/MD

SECTION (1) NOZZLE

X .0680 .1750 .2830 .4380 .7980

PHIN

.000 .0228 .0347 .0229 .0071
 25.000 .0269 .0493
 45.000 .0060 .0075 .0047 .0061
 65.000 .0108 .0109 .0091
 90.000 .0199 .0147 .0137 .0129
 135.000 .0023
 315.000 .0158

MACH (1) = 6.000 ALPHA (2) = 35.000 TI = 94.987 QI = 1.984 HREF = .035

DEPENDENT VARIABLE MU/MD

SECTION (1) NOZZLE

X .0680 .1750 .2830 .4380 .7980

PHIN

.000 .0466 .0842 .0485 .0139
 25.000 .0469 .0723
 45.000 .0175 .0155 .0082 .0108
 65.000 .0273 .0256 .0259
 90.000 .0324 .0308 .0302 .0301
 135.000 .0024
 315.000 .0341

MACH (1) = 6.000 ALPHA (3) = 45.000 TI = 94.987 QI = 1.984 HREF = .035

DEPENDENT VARIABLE MU/MD

SECTION (1) NOZZLE

X .0680 .1750 .2830 .4380 .7980

PHIN

.000 .0751 .1047 .1010 .0385
 25.000 .0687 .0665
 45.000 .0397 .0320 .0250 .0158 .0211
 65.000 .0587 .0503 .0555
 90.000 .0814 .0594 .0875 .0664
 135.000 .0097
 315.000 .0559

(RTN37) (25 APR 74)

AEDC VA352 OMB OR ORB. LEFT MAIN NOZZLE

REFERENCE DATA

STEP = .8236 30.171. XMRP = .0000 IN.
 REF = 82.5803 IN. YMRP = .0000 IN.
 REF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.250
 S.FLAP = .000 ELEVON = .000
 HAW/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.200 QI = 2.341 HREF = .038

SECTION (1) NOZZLE DEPENDENT VARIABLE MU/AD

X .0880 .1750 .2630 .4380 .7880

PHIN

.000 .0279 .0441 .0282 .0083
 25.000 .0343 .0586
 45.000 .0095 .0090 .0079 .0085 .0108
 65.000 .0192 .0178 .0182
 90.000 .0198 .0183 .0179 .0167
 135.000 .0025
 315.000 .0003

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.200 QI = 2.341 HREF = .038

SECTION (1) NOZZLE DEPENDENT VARIABLE MU/AD

X .0880 .1750 .2630 .4380 .7880

PHIN

.000 .0548 .0753 .0552 .0137
 25.000 .0818 .0781
 45.000 .0201 .0174 .0135 .0097 .0174
 65.000 .0373 .0338 .0352
 90.000 .0368 .0362 .0368 .0369
 135.000 .0025
 315.000 .0423



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VAS32)

PAGE 307

AEDC VAS32 OMB 02 ORB. LEFT MAIN NOZZLE

(RTN038) (25 APR 74)

REFERENCE DATA

WEP = .8238 SQ.FT. WEP = .0000 IN.
 LEP = 22.3803 IN. WEP = .0000 IN.
 SEP = 18.3919 IN. WEP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RM/L = 2.900
 B.P.LAP = .000 ELEVON = .000
 HAW/MT = 1.000

MACH (1) = 6.000 ALPHA (1) = 30.000 TI = 95.950 QI = 2.936 WEP = .039

SECTION (1) NOZZLE DEPENDENT VARIABLE MU/NO

X .0660 .1750 .2630 .4360 .7860

PHIN

.000 .0294 .0461 .0299 .0062
 25.000 .0372 .0615
 45.000 .0107 .0097 .0078 .0119
 65.000 .0213 .0196 .0217
 90.000 .0216 .0199 .0186
 135.000 .0029
 315.000 .0219

MACH (1) = 6.000 ALPHA (2) = 35.000 TI = 95.950 QI = 2.936 WEP = .039

SECTION (1) NOZZLE DEPENDENT VARIABLE MU/NO

X .0660 .1750 .2630 .4360 .7860

PHIN

.000 .0294 .0461 .0299 .0062
 25.000 .0372 .0615 .0174
 45.000 .0212 .0167 .0151 .0099 .0222
 65.000 .0339 .0367 .0394
 90.000 .0376 .0377 .0396 .0399
 135.000 .0028
 315.000 .0455

AEDC VAS32 OH-6B OE ORG. LEFT MAIN NOZZLE

(RTN39) (25 APR 74)

REFERENCE DATA

REF = .8236 SQ.FT. XMRP = .0000 IN.
 REF = 22.5603 IN. XMRP = .0000 IN.
 REF = 16.3919 IN. XMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.750
 B.FLAP = .000 ELEVON = .000
 HAWKNT = 1.000

MACH (1) = 0.000 ALPHA (1) = 30.000 TI = 96.100 QI = 2.616 HREF = .041

SECTION (1) NOZZLE

DEPENDENT VARIABLE MU/HO

| R | .0860 | .1750 | .2630 | .4360 | .7860 |
|---------|-------|-------|-------|-------|-------|
| PHIN | | | | | |
| .000 | .0321 | .0309 | .0319 | .0064 | |
| 25.000 | .0394 | .0692 | | | |
| 45.000 | .0112 | .0107 | .0066 | .0066 | .0153 |
| 65.000 | .0246 | .0232 | .0275 | | |
| 90.000 | .0239 | .0214 | .0220 | .0206 | |
| 135.000 | .0026 | | | | |
| 315.000 | .0240 | | | | |

MACH (1) = 0.000 ALPHA (2) = 35.000 TI = 96.100 QI = 2.616 HREF = .041

SECTION (1) NOZZLE

DEPENDENT VARIABLE MU/HO

| R | .0860 | .1750 | .2630 | .4360 | .7860 |
|---------|-------|-------|-------|-------|-------|
| PHIN | | | | | |
| .000 | .0943 | .0794 | .0636 | .0133 | |
| 25.000 | .0990 | .0743 | | | |
| 45.000 | .0225 | .0207 | .0192 | .0113 | .0247 |
| 65.000 | .0362 | .0367 | .0440 | | |
| 90.000 | .0391 | .0394 | .0425 | .0449 | |
| 135.000 | .0026 | | | | |
| 315.000 | .0457 | | | | |



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA392)

PAGE 389

AEDC VA392 OMB 02 ORB. LEFT MAIN NOZZLE

(RTUWD) (25 APR 74)

REFERENCE DATA

REF = .8236 SQ.FT. \dot{m} HP = .0000 IN.
 REF = 22.5603 IN. \dot{m} HP = .0000 IN.
 REF = 18.3919 IN. \dot{m} HP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.000
 S.FLAP = .000 ELEVON = .000
 HAM/HT = 1.000

MACH (1) = 0.000 ALPHA (1) = 30.000 TI = 98.900 QI = 3.118 HREF = .044

SECTION (1) NOZZLE DEPENDENT VARIABLE MUAD

X .0860 .1750 .2630 .4360 .7860

PHIN

.000 .0326 .0823 .0327 .0067
 25.000 .0414 .0702
 45.000 .0119 .0109 .0096 .0100 .0179
 65.000 .0254 .0256 .0341
 90.000 .0259 .0241 .0243 .0220
 135.000 .0032
 315.000 .0259

MACH (1) = 0.000 ALPHA (2) = 39.000 TI = 98.900 QI = 3.118 HREF = .044

SECTION (1) NOZZLE DEPENDENT VARIABLE MUAD

X .0860 .1750 .2630 .4360 .7860

PHIN

.000 .0865 .0762 .0841 .0202
 25.000 .0810 .0761
 45.000 .0234 .0213 .0163 .0123 .0267
 65.000 .0419 .0375 .0477
 90.000 .0396 .0408 .0447 .0407
 135.000 .0024
 315.000 .0454

(RTOM1) (29 APR 74)

AEDC VAS32 OMB 02 ORB. LEFT MAIN NOZZLE

REFERENCE DATA

WEP = .0238 33.17.
 LWP = 22.5803 IN.
 BWP = 18.3319 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RM/L = 3.350
 S.FLAP = .000 ELEVON = .000
 HAW/HT = 1.000

MACH (1) = 6.000 ALPHA (1) = 30.000 YI = 97.600 QI = 3.536 XEF = .046

SECTION (1) NOZZLE DEPENDENT VARIABLE MU/MO

X .0680 .1750 .2630 .4150 .7680

PH/IN

.000 .0336 .0536 .0540 .0091
 25.000 .0427 .0706
 45.000 .0124 .0117 .0096 .0114 .0210
 65.000 .0271 .0274 .0408
 90.000 .0266 .0266 .0269 .0226
 135.000 .0033
 315.000 .0276

MACH (1) = 6.000 ALPHA (2) = 35.000 YI = 97.600 QI = 3.536 XEF = .046

SECTION (1) NOZZLE

DEPENDENT VARIABLE MU/MO

X .0680 .1750 .2630 .4360 .7680

PH/IN

.000 .0397 .0612 .0664 .0204
 25.000 .0632 .0777
 45.000 .0244 .0219 .0165 .0125 .0306
 65.000 .0366 .0366 .0311
 90.000 .0416 .0420 .0452 .0525
 135.000 .0024
 315.000 .0447



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VAS32)

PAGE 301

AEDC VAS32 OMB OR OMB, LEFT MAIN NOZZLE

(RTIME) 23 APR 74)

REFERENCE DATA

REF = .0236 80.FT. IN/MP = .0000 IN.
 REF = 22.3603 IN. IN/MP = .0000 IN.
 REF = 16.3919 IN. IN/MP = .0000 IN.
 SCALE = .0191 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
 B PLAP = .000 ELEVON = .000
 HAWAHT = 1.000

MACH (1) = 6.000 ALPHA (1) = 30.000 TI = 97.050 Q1 = 3.937 MREF = .049

SECTION (1) NOZZLE DEPENDENT VARIABLE MU/MD

| X | .0680 | .1750 | .2830 | .4380 | .7680 |
|---------|-------|-------|-------|-------|-------|
| P-HIN | | | | | |
| .000 | .0359 | .0662 | .0358 | .0094 | |
| 25.000 | .0434 | .0663 | | | |
| 45.000 | .0127 | .0119 | .0108 | .0121 | .0229 |
| 65.000 | .0293 | .0292 | | .0448 | |
| 80.000 | .0313 | .0290 | .0284 | .0240 | |
| 155.000 | .0039 | | | | |
| 315.000 | .0002 | | | | |

MACH (1) = 6.000 ALPHA (2) = 35.000 TI = 97.050 Q1 = 3.937 MREF = .049

SECTION (1) NOZZLE DEPENDENT VARIABLE MU/MD

| X | .0680 | .1750 | .2830 | .4380 | .7680 |
|---------|-------|-------|-------|-------|-------|
| P-HIN | | | | | |
| .000 | .0829 | .0619 | .0714 | .0221 | |
| 25.000 | .0666 | .0604 | | | |
| 45.000 | .0237 | .0239 | .0186 | .0136 | .0341 |
| 65.000 | .0391 | .0307 | | .0551 | |
| 80.000 | .0414 | .0431 | .0471 | .0534 | |
| 155.000 | .0029 | | | | |
| 315.000 | .0444 | | | | |

(RTTRIO) (23 APR 74)

AEDC VA382 OM-8 01 ORB. RCS CENTER

REFERENCE DATA

STEP 1 = .0236 SQ.FT. IN/MP = .0000 IN.
 STEP 2 = 22.5603 IN. IN/MP = .0000 IN.
 STEP 3 = 16.3313 IN. IN/MP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = -8.000 Y1 = 98.600 Q1 = 3.981 MREF = .049
 SECTION (1) RCS CENTER DEPENDENT VARIABLE MU/MD

X/L = .0760 .3000 .6000 .9000 .9750

Z = 0.125 .0475 .0087 .0175 .0321 .0321

MACH (1) = 8.000 ALPHA (2) = .000 Y1 = 98.600 Q1 = 3.981 MREF = .049
 SECTION (1) RCS CENTER DEPENDENT VARIABLE MU/MD

X/L = .0760 .3000 .6000 .9000 .9750

Z = 0.125 .0448 .0048 .0089 .0180 .0191

PARAMETRIC DATA

BETA = .000 RN = 3.720
 S.F.LAP = .000 E.C.C.N = .000
 HAW/HT = 1.000



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA352)

(RTKR11) (25 APR 74)

AEDC VA352 OMB Q1 ORB RCS CENTER

PARAMETRIC DATA
BETA = .000 RV/L = .680
B.FLAP = .000 ELEVON = .000
HAW/MT = 1.000

REFERENCE DATA

REF = .8238 SQ.FT. XMRP = .0000 IN.
REF = 22.9803 IN. YMRP = .0000 IN.
REF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = -8.000 TI = 93.000 Q1 = .677 HREF = .020

SECTION (1) RCS CENTER DEPENDENT VARIABLE MU/40

X/L .0780 .3000 .8000 .9000 .9750

Z
6.125 .0486 .0066 .0270 .0208 .0174

MACH (1) = 8.000 ALPHA (2) = .000 TI = 93.000 Q1 = .677 HREF = .020

SECTION (1) RCS CENTER DEPENDENT VARIABLE MU/40

X/L .0780 .3000 .8000 .9000 .9750

Z
6.125 .0484 .0069 .0073 .0207 .0148

REFERENCE DATA

SETP = .0235 IN. FT. XMRP = .0000 IN.

SETP = 22.5803 IN. XMRP = .0000 IN.

SETP = 18.3913 IN. XMRP = .0000 IN.

SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.400 Q1 = .524 HREF = .018

SECTION (1) RCS CENTER

DEPENDENT VARIABLE HU/4D

X/L .0760 .3000 .8000 .9000 .9750

Z 6.125 .0476 .0207 .0004 .0011 .0012

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.400 Q1 = .524 HREF = .018

SECTION (1) RCS CENTER

DEPENDENT VARIABLE HU/4D

X/L .0760 .3000 .8000 .9000 .9750

Z 6.125 .0440 .0189 .0002 .0003 .0017

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.400 Q1 = .524 HREF = .018

SECTION (1) RCS CENTER

DEPENDENT VARIABLE HU/4D

X/L .0760 .3000 .8000 .9000 .9750

Z 6.125 .0445 .0176 .0003 .0009 .0008

PARAMETRIC DATA

SETA = .000 RM/L = .500

B.FLAP = .000 ELEVON = .000

HAW/HT = 1.000



DATE 23 SEP 74

TABULATED DATA LISTING FOR CH4B (AEDC VA332)

PAGE 395

AEDC VA332 CH4B Q1 ORB. RCS CENTER

(RTKR13) (25 APR 74)

REFERENCE DATA

STEP = .8238 SQ.FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. YMRP = .0000 IN.
 STEP = 18.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.100 Q1 = 1.003 HREF = .025

SECTION (1) RCS CENTER DEPENDENT VARIABLE HU/HO

X/L .0760 .3000 .6000 .9000 .9750

Z

8.125 .0439 .0188 .0003 .0007 .0025

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.100 Q1 = 1.003 HREF = .025

SECTION (1) RCS CENTER DEPENDENT VARIABLE HU/HO

X/L .0760 .3000 .6000 .9000 .9750

Z

8.125 .0411 .0173 .0001 .0006 .0028

MACH (1) = 8.000 ALPHA (3) = 40.000 TI = 94.100 Q1 = 1.003 HREF = .025

SECTION (1) RCS CENTER DEPENDENT VARIABLE HU/HO

X/L .0760 .3000 .6000 .9000 .9750

Z

8.125 .0402 .0167 .0004 .0017 .0028

PARAMETRIC DATA

BETA = .000 RN/L = 1.000
 B.FLAP = .000 ELEVON = .000
 HAWAHT = 1.000

(RTKR14) (25 APR 74)

AEDC VAS32 QMB 01 ORB. RCS CENTER

REFERENCE DATA

STEP = .8236 SQ.FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. YMRP = .0000 IN.
 BREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.950 QI = 1.994 HREF = .035

SECTION (1) RCS CENTER

DEPENDENT VARIABLE MU/HD

X/L .0760 .3000 .8000 .9000 .9750

Z

6.125 .0437 .0193 .0004 .0016 .0014

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.950 QI = 1.994 HREF = .035

SECTION (1) RCS CENTER

DEPENDENT VARIABLE MU/HD

X/L .0760 .3000 .8000 .9000 .9750

Z

6.125 .0410 .0183 .0002 .0007 .0036

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
 S.FLAP = .000 ELEVON = .000
 HAW/HT = 1.000



TABULATED DATA LISTING FOR CH4B (AEDC V4352)

DATE 23 SEP 74

(RTKR15) (25 APR 74)

AEDC V4352 CH4B Q1 ORB. RCS CENTER

PARAMETRIC DATA
BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = 1.000

REFERENCE DATA

REF = .8238 30.FT. XMRP = .0000 IN.
LREF = 22.5003 IN. YMRP = .0000 IN.
SREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 25.000 T1 = 97.867 Q1 = 3.955 WREF = .049

SECTION (1) RCS CENTER DEPENDENT VARIABLE MU/AD

X/L .0760 .3000 .6700 .9000 .9750

Z
8.125 .0449 .0219 .0011 .0041 .0063

MACH (1) = 8.000 ALPHA (2) = 30.000 T1 = 97.867 Q1 = 3.955 WREF = .049

SECTION (1) RCS CENTER DEPENDENT VARIABLE MU/AD

X/L .0760 .3000 .6000 .9000 .9750

Z
8.125 .0441 .0216 .0006 .0026 .0025

MACH (1) = 8.000 ALPHA (3) = 35.000 T1 = 97.867 Q1 = 3.955 WREF = .049

SECTION (1) RCS CENTER DEPENDENT VARIABLE MU/AD

X/L .0760 .3000 .6000 .9000 .9750

Z
8.125 .0426 .0198 .0004 .0012 .0049



AEDC VA352 OH-6B 01 ORB. RCS CENTER

(RTKR17) (25 APR 74)

REFERENCE DATA

REF = .0238 SQ.FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. YMRP = .0000 IN.
 BREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 6.000 ALPHA (1) = 30.000 TI = 97.700 QI = 3.949 HREF = .049

SECTION (1) RCS CENTER

DEPENDENT VARIABLE MU/AD

X/L .0760 .3000 .6000 .9000 .9750

Z

6.125 .0444 .0211 .0006 .0027 .0029

MACH (1) = 6.000 ALPHA (2) = 35.000 TI = 97.700 QI = 3.949 HREF = .049

SECTION (1) RCS CENTER

DEPENDENT VARIABLE MU/AD

X/L .0760 .3000 .6000 .9000 .9750

Z

6.125 .0421 .0198 .0006 .0015 .0041

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
 B.FLAP = 10.000 ELEVON = 5.000
 HAWAHT = 1.000



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA352)

PAGE 308

AEDC VA352 OMB 01 OMB RCS CENTER

(RTTR18) (23 APR 74)

REFERENCE DATA

REF = .8236 80.FT. XREF = .0000 IN.
 LREF = 22.5803 IN. YREF = .0000 IN.
 SREF = 16.3819 IN. ZREF = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.200 QI = 3.933 WREF = .049

SECTION (1) RCS CENTER DEPENDENT VARIABLE MUAD

X/L .0760 .3000 .8000 .9000 .9750
 Z
 6.125 .0630 .0321 .0019 .0064 .0073

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.200 QI = 3.933 WREF = .049

SECTION (1) RCS CENTER DEPENDENT VARIABLE MUAD

X/L .0760 .3000 .8000 .9000 .9750
 Z
 6.125 .0650 .0371 .0017 .0062 .0072

PARAMETRIC DATA

BETA = -6.000 RN/L = 3.780
 S.F.LAP = 10.000 ELEVON = 9.000
 HAW/HT = 1.000

AEDC VA352 OHB Q1 ORB. RCS CENTER

(RTKR19) (25 APR 74)

REFERENCE DATA

STEP = .0238 80. FT. XMRP = .0000 IN.
 STEP = 22.5803 IN. XMRP = .0000 IN.
 STEP = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 6.000 ALPHA (1) = 30.000 TI = 95.850 QI = 1.983 HREF = .035

SECTION (1) RCS CENTER

DEPENDENT VARIABLE MU/AD

X/L .0760 .3000 .8000 .9000 .9750

Z

6.125 .0576 .0390 .0009 .0041 .0114

MACH (1) = 6.000 ALPHA (2) = 35.000 TI = 95.850 QI = 1.983 HREF = .035

SECTION (1) RCS CENTER

DEPENDENT VARIABLE MU/AD

X/L .0760 .3000 .8000 .9000 .9750

Z

6.125 .0566 .0363 .0016 .0033 .0076

PARAMETRIC DATA

BETA = -5.000 RV/L = 2.000
 B.FLAP = 10.000 ELEVON = 5.000
 MAX/MT = 1.000



DATE 23 SEP 74

TABULATED DATA LISTING FOR OHB (AEDC VA352)

PAGE 401

AEDC VA352 OHB 01 ORB. RCS CENTER

(RTK820) (25 APR 74)

REFERENCE DATA

REF = .0238 32 FT. WHP = .0000 IN.
 REF = 22.9603 IN. WHP = .0000 IN.
 REF = 16.3919 IN. WHP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 0.000 ALPHA (1) = 30.000 TI = 95.900 QI = 1.980 HREF = .035

SECTION (1) RCS CENTER DEPENDENT VARIABLE MU/AD

X/L .0760 .3500 .6000 .9000 .9750

Z

0.125 .0451 .0196 .0004 .0012 .0012

MACH (1) = 0.000 ALPHA (2) = 35.000 TI = 95.900 QI = 1.980 HREF = .035

SECTION (1) RCS CENTER DEPENDENT VARIABLE MU/AD

X/L .0760 .3000 .6000 .9000 .9750

Z

0.125 .0415 .0165 .0002 .0005 .0015

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
 S.F.LAP = 10.000 ELEVON = 5.000
 HAWAHT = 1.000

DATE 23 SEP 74

TABULATED DATA LISTING FOR QMB (AEDC VA352)

PAGE 402

AEDC VA352 QMB 01 ORB. RCS CENTER

(RTMR21) (25 APR 74)

REFERENCE DATA

STEP = .0238 SQ.FT. XMRP = .0000 IN.
 STEP = 22.5903 IN. YMRP = .0000 IN.
 STEP = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -9.000 RN/L = .500
 B.F.LAP = 10.000 ELEVON = 9.000
 HAW/HT = 1.000

MACH (1) = 0.000 ALPHA (1) = 30.000 TI = 91.960 QI = .518 MREF = .017

SECTION (1) RCS CENTER DEPENDENT VARIABLE MU/AD

X/L .0760 .3000 .6000 .9000 .9750

Z

0.125 .0807 .0370 .0006 .0009 .0014

MACH (1) = 0.000 ALPHA (2) = 35.000 TI = 91.960 QI = .518 MREF = .017

SECTION (1) RCS CENTER DEPENDENT VARIABLE MU/AD

X/L .0760 .3000 .6000 .9000 .9750

Z

0.125 .0879 .0339 .0003 .0014 .0041



DATE 23 SEP 74

TABULATED DATA LISTING FOR CHB (AEDC VAS32)

PAGE 403

(RTK022) (23 APR 74)

AEDC VAS32 CHB 01 ORB. RCS CENTER

REFERENCE DATA

STEP = .0238 33.5 FT. XMRP = .0000 IN.
 STEP = 22.5803 IN. XMRP = .0000 IN.
 STEP = 18.3919 IN. XMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 30.000 T1 = 93.400 Q1 =

SECTION (1) RCS CENTER DEPENDENT VARIABLE MUAND

Y/L .0760 .3000 .6000 .9000 .9750

Z

0.128 .0458 .0183 .0001 .0008 .0026

MACH (1) = 8.000 ALPHA (2) = 35.000 T1 = 93.400 Q1 =

SECTION (1) RCS CENTER DEPENDENT VARIABLE MUAND

Y/L .0760 .3000 .6000 .9000 .9750

Z

0.128 .0436 .0174 .0004 .0016 .0024

PARAMETRIC DATA

BETA = .000 FN/L = .500
 B.FLAP = 10.000 ELEVON = 5.000
 MAX/MT = 1.000

.523 REF = .016

DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VAS38)

PAGE 404

AEDC VAS32 OMB 01 OMB, RCS CENTER

(RTN823) (23 APR 74)

REFERENCE DATA

STEP = .0238 80. FT. 2MRP = .0000 IN.
 STEP = 82.5003 IN. 2MRP = .0000 IN.
 STEP = 16.3619 IN. 2MRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.433 QI = .521 WREF = .018
 SECTION (1) RCS CENTER DEPENDENT VARIABLE MU/MD

X/L .0760 .5000 .6000 .8000 .9000 .9750

Z

0.125 .0455 .0209 .0002 .0006 .0020

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.433 QI = .521 WREF = .018
 SECTION (1) RCS CENTER DEPENDENT VARIABLE MU/MD

X/L .0760 .5000 .6000 .8000 .9000 .9750

Z

0.125 .0441 .0193 .0002 .0014 .0019

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.433 QI = .521 WREF = .018
 SECTION (1) RCS CENTER DEPENDENT VARIABLE MU/MD

X/L .0760 .5000 .6000 .8000 .9000 .9750

Z

0.125 .0436 .0189 .0003 .0009 .0015

PARAMETRIC DATA

BETA = .000 IN/L = .500
 S.F. CAP = 10.000 ELEVATION = 10.000
 MAX/MT = 1.000



AEDC VAS32 OM4B Q1 ORB. RCS CENTER

(RTMR24) (23 APR 74)

REFERENCE DATA

REF = .0236 IN/FT. XREF = .0000 IN.
 REF = 22.3603 IN. XREF = .0000 IN.
 REF = 16.3515 IN. XREF = .0000 IN.
 SCALE = .0195 SCALE

PARAMETRIC DATA

BETA = -6.000 RN/L = .500
 B.FLAP = 10.000 ELEVON = 10.000
 HAU/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.233 Q1 = .23 MREF = .018

SECTION (1) RCS CENTER DEPENDENT VARIABLE MU/AD

R/L .0780 .3000 .8000 .9000 .9750

Z
 6.125 .0810 .0325 .0022 .0036 .0037

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.233 Q1 = .523 MREF = .018

SECTION (1) RCS CENTER DEPENDENT VARIABLE MU/AD

R/L .0780 .3000 .8000 .9000 .9750

Z
 6.125 .0897 .0397 .0009 .0010 .0016

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.233 Q1 = .523 MREF = .018

SECTION (1) RCS CENTER DEPENDENT VARIABLE MU/AD

R/L .0780 .3000 .8000 .9000 .9750

Z
 6.125 .0881 .0377 .0008 .0008 .0024

AEDC VAS32 Q4B Q1 Q88 RCS CENTER

(RTNR25) (25 APR 74)

REFERENCE DATA

STEP 1 = .4238 30.87 INCH = .0000 IN.
 STEP 2 = 22.5863 IN. = .0000 IN.
 STEP 3 = 18.3415 IN. = .0000 IN.
 SCALE = .0174 SCALE

PARAM (1) = 6.000 ALPHA (1) = 30.000 T1 = 54.850 Q1 = 1.985 REF = .035

SECTION 1 (1) RCS CENTER

DEPENDENT VARIABLE MU/NO

R/C = .0760 .3000 .6000 .9000 .9750

2

6.125 .6444 .0191 .0004 .0014 .0017

PARAM (1) = 6.000 ALPHA (2) = 35.000 T1 = 54.850 Q1 = 1.985 REF = .035

SECTION 2 (2) RCS CENTER

DEPENDENT VARIABLE MU/NO

R/C = .0760 .3000 .6000 .9000 .9750

2

6.125 .6417 .0161 .0005 .0012 .0024

PARAMETRIC DATA

BETA = .0000 IN/L = 2.000
 B.F. CAP = .0.0000 ELEVATION = 10.000
 MAX/HT = 1.000



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA392)

PAGE 407

AEDC VA392 OMB 01 OMB, RCS CENTER

(RTK028) (25 APR 74)

REFERENCE DATA

REF = .8238 32.57. XREF = .0000 IN.
REF = 22.9407 IN. XREF = .0000 IN.
REF = 19.3919 IN. XREF = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 R/L = 2.000
B.FLAP = 10.000 ELEVON = 10.000
HAWAHT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 T1 = 95.450 Q1 = 1.983 HREF = .035

SECTION (1) RCS CENTER DEPENDENT VARIABLE HJ/40

X/L .0760 .3000 .8000 .9000 .9750

Z
6.125 .0576 .0386 .0009 .0041 .0109

MACH (1) = 8.000 ALPHA (2) = 35.000 T1 = 95.450 Q1 = 1.983 HREF = .035

SECTION (1) RCS CENTER DEPENDENT VARIABLE HJ/40

X/L .0760 .3000 .8000 .9000 .9750

Z
6.125 .0585 .0369 .0017 .0032 .0079

(RTRR27) (23 APR 74)

AEDC VA352 QMB 01 ORB. RCS CENTER

REFERENCE DATA

PARAMETRIC DATA

STEP = .0238 82.171. XMRP = .0000 IN.
 STEP = 22.5803 IN. YMRP = .0000 IN.
 STEP = 19.3515 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

BETA = .0000 R = 3.720
 B.P.A. = 10.000 S.L.A. = 10.000
 M4/M1 = 1.000

WACH (1) = 8.000 ALPHA (1) = 25.000 T1 = 97.387 Q1 = 3.936 HREF = .049

SECTION (1) RCS CENTER DEPENDENT VARIABLE MU/MC

X/L .0760 .3000 .8000 .9000 .9750

Z
6.125 .0415 .0219 .0012 .0037 .0065

WACH (1) = 8.000 ALPHA (2) = 30.000 T1 = 97.387 Q1 = 3.936 HREF = .049

SECTION (1) RCS CENTER DEPENDENT VARIABLE MU/MC

X/L .0760 .3000 .8000 .9000 .9750

Z
6.125 .0441 .0208 .0007 .0024 .0030

WACH (1) = 8.000 ALPHA (3) = 35.000 T1 = 97.387 Q1 = 3.936 HREF = .049

SECTION (1) RCS CENTER DEPENDENT VARIABLE MU/MC

X/L .0760 .3000 .8000 .9000 .9750

Z
6.125 .0419 .0194 .0007 .0021 .0022



DATE 23 SEP 74

TABULATED DATA LISTING FOR OHB (AEDC VA352)

PAGE 409

AEDC VA352 OHB C: ORB. RCS CENTER

(RTK026) (25 APR 74)

REFERENCE DATA

REF = .0236 SQ.FT. XMRP = .0000 IN.
 REF = 22.9803 IN. YMRP = .0000 IN.
 REF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -8.000 RN/L = 3.720
 B.FLAP = 10.000 ELEVON = 10.000
 HAN/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1) RCS CENTER DEPENDENT VARIABLE MU/NO

X/L .0760 .3000 .8000 .9000 .9750

Z

6.125 .0594 .0317 .0027 .0045 .0152

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1) RCS CENTER DEPENDENT VARIABLE MU/NO

X/L .0760 .3000 .8000 .9000 .9750

Z

6.125 .0571 .0366 .0017 .0106 .0101

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1) RCS CENTER DEPENDENT VARIABLE MU/NO

X/L .0760 .3000 .8000 .9000 .9750

Z

6.125 .0553 .0366 .0017 .0082 .0089

DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA392)

PAGE 410

AEDC VA392 OMB Q2 ORB. BASE PLATE

(RTN29) (23 APR 74)

REFERENCE DATA

STEP = .0236 30.1 T. XMRP = .0000 IN.
 LREF = 22.5803 IN. YMRP = .0000 IN.
 DREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

ETA = .000 RMU = 3.720
 FLAP = .000 ELEVON = .000
 HAW/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.087 QI = 3.940 HREF = .049

SECTION (1) BASE PLATE

DEPENDENT VARIABLE HU/HO

Y .0000 1.2250 1.9250

Z

5.600 .0020
 7.520 .0026 .0017

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.087 QI = 3.940 HREF = .049

SECTION (1) BASE PLATE

DEPENDENT VARIABLE HU/HO

Y .0000 1.2250 1.9250

Z

5.600 .0014
 7.520 .0014 .0008

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.087 QI = 3.940 HREF = .049

SECTION (1) BASE PLATE

DEPENDENT VARIABLE HU/HO

Y .0000 1.2250 1.9250

Z

5.600 .0026
 7.520 .0013 .0009



TABULATED DATA LISTING FOR OH4B (AEDC V4352)

(RTMPSD) (23 APR 74)

AEDC V4352 OH4B 02 ORB. BASE PLATE

REFERENCE DATA
 XREF = .0238 SQ.FT. XMRP = .0000 IN.
 YREF = 22.9803 IN. YMRP = .0000 IN.
 ZREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA
 BETA = .000 FN/L = 2.000
 B.FLAP = .000 ELEVON = .000
 HAW/HT = 1.000

WACH (1) = 8.000 ALPHA (1) = 25.000 TI = 94.933 QI = 1.986 HREF = .035

SECTION (1) BASE PLATE
 DEPENDENT VARIABLE HU/HO

Y .0000 1.2250 1.9250

Z 5.600 .0006 .0011

7.520 .0004 .0010

WACH (1) = 8.000 ALPHA (2) = 30.000 TI = 94.933 QI = 1.986 HREF = .035

SECTION (1) BASE PLATE
 DEPENDENT VARIABLE HU/HO

Y .0000 1.2250 1.9250

Z 5.600 .0004 .0008

7.520 .0011 .0007

WACH (1) = 8.000 ALPHA (3) = 35.000 TI = 94.933 QI = 1.986 HREF = .035

SECTION (1) BASE PLATE
 DEPENDENT VARIABLE HU/HO

Y .0000 1.2250 1.9250

Z 5.600 .0008 .0022

7.520 .0013 .0007

DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC V3352)

PAGE 412

AEDC V3352 OMB 02 ORS. BASE PLATE

(RTNP31) (25 APR 74)

REFERENCE DATA

XREF = .8238 SQ.FT. XMRP = .0000 IN.
 YREF = 25.9803 IN. YMRP = .0000 IN.
 ZREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 T31/L = .506
 B.FLAP = .000 ELEVON = .000
 HAWAHT = 1.000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 92.933 QI = .523 HREF = .018

SECTION (1) BASE PLATE

DEPENDENT VARIABLE MU/MD

Y .0000 1.2250 1.9250

Z

5.600 .0007 .0011
 7.520 .0008 .0012

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 92.933 QI = .523 HREF = .018

SECTION (1) BASE PLATE

DEPENDENT VARIABLE MU/MD

Y .0000 1.2250 1.9250

Z

5.600 .0011 .0008
 7.520 .0007 .0011

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 92.933 QI = .523 HREF = .018

SECTION (1) BASE PLATE

DEPENDENT VARIABLE MU/MD

Y .0000 1.2250 1.9250

Z

5.600 .0010 .0014
 7.520 .0018 .0008



TABULATED DATA LISTING FOR OM48 (AEDC V4352)

DATE 23 SEP 74

(RTN32) (25 APR 74)

AEDC V4352 OM48 02 OPG. BASE PLATE

REFERENCE DATA

REF = .0238 SQ. FT. XREF = .0000 IN.
 LREF = 22.5803 IN. XREF = .0000 IN.
 SREF = 18.3919 IN. XREF = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 93.400 QI = 1.000 HREF = .024

SECTION (1) BASE PLATE

DEPENDENT VARIABLE HU/HO

Y .0000 1.2250 1.9250

Z
 5.600 .0004 .0008
 7.520 .0000 .0007

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 93.400 QI = 1.000 HREF = .024

SECTION (1) BASE PLATE

DEPENDENT VARIABLE HU/HO

Y .0000 1.2250 1.9250

Z
 5.600 .0009 .0012
 7.520 .0015 .0009

MACH (1) = 8.000 ALPHA (3) = 45.000 TI = 93.400 QI = 1.000 HREF = .024

SECTION (1) BASE PLATE

DEPENDENT VARIABLE HU/HO

Y .0000 1.2250 1.9250

Z
 5.600 .0013 .0022
 7.520 .0014 .0014

PARAMETRIC DATA

BETA = .000 TM/L = 1.000
 S.F. PLAP = .000 ELEVON = .000
 HAW/HT = 1.000

DATE 23 SEP 74

TABULATED DATA LISTING FOR OHB (AEDC VA352)

PAGE 414

AEDC VA352 OHB 02 ORB. BASE PLATE

(RT1933) (23 APR 74)

REFERENCE DATA

SEP = .0238 SQ.FT. XMRP = .0000 IN.
 JEP = 22.5803 IN. XMRP = .0000 IN.
 SEP = 16.3919 IN. XMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .0000 RN/L = 1.250
 S.FLAP = .0000 ELEVON = .000
 HAWK/H = 1.000

MACH (1) = 6.000 ALPHA (1) = 30.000 TI = 94.250 QI = 1.253 HREF = .027

SECTION (1) BASE PLATE

DEPENDENT VARIABLE MU/MD

Y .0000 1.2250 1.9250

Z

5.600 .0004 .0008
 7.920 .0004 .0003

MACH (1) = 6.000 ALPHA (2) = 35.000 TI = 94.250 QI = 1.253 HREF = .027

SECTION (1) BASE PLATE

DEPENDENT VARIABLE MU/MD

Y .0000 1.2250 1.9250

Z

5.600 .0008 .0011
 7.920 .0006 .0009



DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-6B (AEDC VAS32)

PAGE 415

AEDC VAS32 OH-6B 02 ORB. BASE PLATE

(RTOP34) (23 APR 74)

REFERENCE DATA

REF = .8236 SQ.FT. XMRP = .0000 IN.
REF = 22.9803 IN. XMRP = .0000 IN.
REF = 16.3919 IN. XMRP = .0000 IN.
SCALE = .0175 SCALE

MACH (1) = 0.000 ALPHA (1) = 30.000 TI = 94.900 QI = 1.934 HREF = .030

SECTION (1) BASE PLATE

DEPENDENT VARIABLE MU/MD

Y .0000 1.2250 1.9250

Z

5.600 .0004 .0006
7.920 .0010 .0003

MACH (1) = 0.000 ALPHA (2) = 35.000 TI = 94.900 QI = 1.934 HREF = .030

SECTION (1) BASE PLATE

DEPENDENT VARIABLE MU/MD

Y .0000 1.2250 1.9250

Z

5.600 .0005 .0010
7.920 .0014 .0010

PARAMETRIC DATA

BETA = .000 RN/L = 1.500
B.FLAP = .000 ELEVON = .000
HAWAHT = 1.000

DATE 23 SEP 74

TABULATED DATA LISTING FOR Q-8 (AEDC VAS92)

PAGE 416

AEDC VAS92 Q-8 Q8 ORB. BASE PLATE

(RTN033) (23 APR 74)

REFERENCE DATA

REF = .0236 SQ.FT. XMRP = .0000 IN.
REF = 22.5803 IN. XMRP = .0000 IN.
REF = 16.3919 IN. XMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.750
S.F.L.A.P. = .000 ELEVON = .000
MAN/MT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.200 Q1 = 1.797 HREF = .033

SECTION (1) BASE PLATE

DEPENDENT VARIABLE MU/40

Y .0000 1.2250 1.9250

Z
5.600 .0004 .0008
7.520 .0011 .0008

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.200 Q1 = 1.797 HREF = .033

SECTION (1) BASE PLATE

DEPENDENT VARIABLE MU/40

Y .0000 1.2250 1.9250

Z
5.600 .0007 .0017
7.520 .0012 .0007



AEDC VA352 QWB Q2 ORB. BASE PLATE

(RTOP36) (25 APR 74)

REFERENCE DATA

REF = .0236 SQ.FT. RMP = .0000 IN.
 REF = 22.5903 IN. RMP = .0000 IN.
 REF = 16.3919 IN. RMP = .0000 IN.
 SCALE = .0179 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
 B.FLAP = .000 ELEVON = .000
 HAW/HT = 1.000

MACH (1) = 6.000 ALPHA (1) = 30.000 TI = 94.987 QI = 1.984 HREF = .035

SECTION (1) BASE PLATE DEPENDENT VARIABLE MU/MD

Y .0000 1.2250 1.9250

Z
 5.600 .0008 .0007
 7.520 .0011 .0008

MACH (1) = 6.000 ALPHA (2) = 35.000 TI = 94.987 QI = 1.984 HREF = .035

SECTION (1) BASE PLATE DEPENDENT VARIABLE MU/MD

Y .0000 1.2250 1.9250

Z
 5.600 .0008 .0015
 7.520 .0013 .0009

MACH (1) = 6.000 ALPHA (3) = 40.000 TI = 94.987 QI = 1.984 HREF = .035

SECTION (1) BASE PLATE DEPENDENT VARIABLE MU/MD

Y .0000 1.2250 1.9250

Z
 5.600 .0045 .0086
 7.520 .0026 .0019



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VAS32)

PAGE 418

AEDC VAS32 OMB OF OMB. BASE PLATE

(RTN37) (25 APR 74)

REFERENCE DATA

STEP = .0238 30.FT. 24MP = .0000 IN.
 STEP = 22.5603 IN. 24MP = .0000 IN.
 STEP = 18.3919 IN. 24MP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 6.000 ALPHA (1) = 30.000

TI =

99.200

QI =

2.341

MEF =

.038

SECTION (1) BASE PLATE

DEPENDENT VARIABLE MU/MD

Y .0000 1.2250 1.9250

Z

5.600 .0004 .0008

7.920 .0010 .0008

MACH (1) = 6.000 ALPHA (2) = 35.000

TI =

99.200

QI =

2.341

MEF =

.038

SECTION (1) BASE PLATE

DEPENDENT VARIABLE MU/MD

Y .0000 1.2250 1.9250

Z

5.600 .0019 .0019

7.920 .0014 .0009

PARAMETRIC DATA

BETA = .000 RN/L = 2.250
 B.P.LAP = .000 ELEVON = .000
 HAW/MT = 1.000



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VAS32)

PAGE 419

AEDC VAS32 OMB OR OMB, BASE PLATE

(RTHP38) (25 APR 74)

REFERENCE DATA

SEP = .0238 SQ.FT. IMP = .0000 IN.
 REP = 22.5803 IN. IMP = .0000 IN.
 SEP = 18.3819 IN. IMP = .0000 IN.
 SCALE = .0175 SCALE

WACH (1) = 8.000 ALPHA (1) = 30.000 TI = 98.950 QI = 2.936 HREF = .039

SECTION (1) BASE PLATE

DEPENDENT VARIABLE MU/NO

Y .0000 1.2250 1.9250

Z
 9.800 .0008 .0009
 7.920 .0011 .0007

WACH (1) = 8.000 ALPHA (2) = 39.000 TI = 98.950 QI = 2.936 HREF = .039

SECTION (1) BASE PLATE

DEPENDENT VARIABLE MU/NO

Y .0000 1.2250 1.9250

Z
 9.800 .0020 .0024
 7.920 .0014 .0009

PARAMETRIC DATA

BETA = .000 FN/L = 2.500
 S.F.LAP = .000 ELEVON = .000
 HAW/MT = 1.000

DATE 23 SEP 74

TABULATED DATA LISTING FOR OM48 (AEDC VA392)

PAGE 420

AEDC VA392 OM48 OR ORB. BASE PLATE

(RTHP39) (23 APR 74)

REFERENCE DATA

REF = .0218 83.87, XMP = .0000 IN.
REF = 22.5803 IN, XMP = .0000 IN.
REF = 18.3919 IN, XMP = .0000 IN.
SCALE = .0195 SCALE

MACH (1) = 0.000 ALPHA (1) = 30.000 TI = 90.100 OI = 2.816 HEF = .041

SECTION (1) BASE PLATE

DEPENDENT VARIABLE MU/MO

Y .0000 1.2250 1.9250

Z
9.000 .0007 .0010
7.920 .0009 .0004

MACH (1) = 0.000 ALPHA (2) = 30.000 TI = 90.100 OI = 2.816 HEF = .041

SECTION (1) BASE PLATE

DEPENDENT VARIABLE MU/MO

Y .0000 1.2250 1.9250

Z
9.000 .0023 .0030
7.920 .0012 .0008

PARAMETRIC DATA

BETA = .000 RM/L = 2.750
B.F.LAP = .000 ELEVON = .000
HAWKNT = 1.000



DATE 23 SEP 74

TABULATED DATA LISTING FOR OHB (AEDC VA332)

PAGE 421

AEDC VA332 OHB 02 ORB. BASE PLATE

IRTP40C (23 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. WM/P = .0000 IN.
 UREF = 22.3803 IN. WM/P = .0000 IN.
 BREF = 16.3919 IN. WM/P = .0000 IN.
 SCALE = .0175 SCALE

BETA = .000 RN/L = 3.000
 B.FLAP = .000 ELEVON = .000
 HAWAHT = 1.000

PARAMETRIC DATA

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 96.900 QI = 3.118 HREF = .044

DEPENDENT VARIABLE MU/40

SECTION (1) BASE PLATE

Y .0000 1.2250 1.9250

Z
 5.600 .0010 .0013
 7.520 .0010 .0008

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 96.900 QI = 3.118 HREF = .044

DEPENDENT VARIABLE MU/40

SECTION (1) BASE PLATE

Y .0000 1.2250 1.9250

Z
 5.600 .0024 .0033
 7.520 .0012 .0009

DATE 23 SEP 74

TABULATED DATA LISTING FOR CMB3 (METC VAS32)

PAGE 422

METC VAS32 CMB3 22 CMB. BASE PLATE

10779411 (23 APR 74)

REFERENCE DATA

STEP 1 1235 34.871 AMP = 1000 IN.
STEP 2 22 3503 IN. AMP = 1000 IN.
STEP 3 18 3515 IN. AMP = 1000 IN.
SCALE 2 1000 SCALE

PARAMETER 1 = 4.000 ALPHA (1) = 30.000 T1 = 97.800 Q1 = 3.034 REF = .048

SECTION 1: BASE PLATE

DEPENDENT VARIABLE MUAC

Y 1000 1.220 1.320

Z
3.876 1011 1012
3.932 1009 1008

PARAMETER 2 = 4.000 ALPHA (2) = 30.000 T1 = 97.800 Q1 = 3.034 REF = .048

SECTION 1: BASE PLATE

DEPENDENT VARIABLE MUAC

Y 1000 1.220 1.320

Z
3.876 1011 1012
3.932 1009 1008

PARAMETRIC DATA

BETA = .000 R1/C = 3.350
S.F. ADP = .000 E.F. ADP = .000
PARAMETER = 1.000



TABULATED DATA LISTING FOR OMB (AEDC VA332)

DATE 23 SEP 74

(RTN942) (29 APR 74)

AEDC VA332 OMB Q2 ORB. BASE PLATE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = 1.000

REFERENCE DATA

REF = .9236 SQ.FT. XMRP = .0000 IN.
REF = 22.5803 IN. XMRP = .0000 IN.
REF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 30.000 Y1 = 97.000 Q1 = 3.937 HREF = .049

DEPENDENT VARIABLE H1/H0

SECTION (1) BASE PLATE

Y .0000 1.2250 1.9250

Z
5.600 .0013
7.520 .0011 .0004

MACH (1) = 8.000 ALPHA (2) = 35.000 Y1 = 97.000 Q1 = 3.937 HREF = .049

DEPENDENT VARIABLE H1/H0

SECTION (1) BASE PLATE

Y .0000 1.2250 1.9250

Z
5.600 .0028 .0042
7.520 .0014 .0013

DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA352)

PAGE 424

AEDC VA352 OMB Q1+T10 ORB, OMB MOD

(RTM001) (25 APR 74)

REFERENCE DATA

SIZE = .8238 SQ.FT. XREF = .0000 IN.
 LREF = 22.5803 IN. YREF = .0000 IN.
 BREF = 16.3919 IN. ZREF = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.780
 B.FLAP = .000 ELEVON = .000
 HAV/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = -10.000 T1 = 97.800 Q1 = 3.935 HREF = .049

SECTION (1) OMB MOD

DEPENDENT VARIABLE HI/LO

X/L .7800 .8050 .8290 .8620 .9630 1.0000 1.0140

Z

8.295 .2727 .1887 .1042 .0601 .0000 .0000
 8.340 .0070
 8.650 .0000
 8.727 .0000
 8.750 .0000 .0000 .0000
 8.855 .0000
 8.942 .0000
 8.979 .0000
 9.056 .0000
 9.118 .0000
 9.222 .0000
 9.275 .0000

MACH (1) = 8.000 ALPHA (2) = -5.000 T1 = 97.800 Q1 = 3.935 HREF = .049

SECTION (1) OMB MOD

DEPENDENT VARIABLE HI/LO

X/L .7800 .8050 .8290 .8620 .9630 1.0000 1.0140

Z

8.295 .1611 .0822 .0656 .0673 .0000 .0000
 8.340 .0000
 8.650 .0000
 8.727 .0000
 8.750 .0000 .0000 .0000
 8.855 .0000
 8.942 .0000
 8.979 .0000
 9.056 .0000
 9.118 .0000
 9.222 .0000
 9.275 .0000

DATE 23 SEP 74 TABULATED DATA LISTING FOR OM48 (AEDC VA352)

(RTNMD1)

AEDC VA352 OM48 O1+T10 ORB. OM48 POD

MACH (1) = 8.000 ALPHA (3) = .000 T1 = 97.600 Q1 = 3.935 HREF = .049

SECTION (1) OM48 POD DEPENDENT VARIABLE W/LAD

X/L .7800 .8050 .8290 .8620 .8930 1.0000 1.00540

Z

8.295 .0382 .1854 .0951 .0501 .0000 .0000 .0000
 8.340 .0000
 8.650 .0000
 8.727 .0000
 8.750 .0000
 8.855 .0000
 8.942 .0000
 8.979 .0000
 9.056 .0000
 9.118 .0000
 9.222 .0000
 9.275 .0000

MACH (1) = 8.000 ALPHA (4) = .000 T1 = 97.600 Q1 = 3.935 HREF = .049

SECTION (1) OM48 POD DEPENDENT VARIABLE W/LAD

X/L .7800 .8050 .8290 .8620 .8930 1.0000 1.0140

Z

8.295 .0337 .1245 .0804 .0417 .0000 .0000 .0000
 8.340 .0000
 8.650 .0000
 8.727 .0000
 8.750 .0000
 8.855 .0000
 8.942 .0000
 8.979 .0000
 9.056 .0000
 9.118 .0000
 9.222 .0000
 9.275 .0000

DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA352)

PAGE 426

AEDC VA352 OMB 01+110 OMB. OMS POD

(RTK002) (25 APR 74)

REFERENCE DATA

STEP = .9238 39.F.T. XMRP = .0000 IN.
 LREF = 22.5803 IN. YMRP = .0000 IN.
 GREP = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 RN/L = 3.720
 B.F.LAP = .000 ELEVON = .000
 HAW/HT = 1.000

MACH (1) = 8.000 BETA (1) = -2.000 TI = 97.350 QI = 3.942 WREF = .049
 SECTION (1) OMS POD

DEPENDENT VARIABLE HI/AD

| X/L | .7800 | .8050 | .8290 | .8620 | .9630 | 1.0000 | 1.0140 |
|-------|-------|-------|-------|-------|-------|--------|--------|
| Z | | | | | | | |
| 6.295 | .2090 | .2673 | .1572 | .0928 | .0000 | .0000 | .0000 |
| 6.540 | .0000 | .0000 | | | | | |
| 6.650 | .0000 | | | | | | |
| 6.727 | | .0000 | | | | | |
| 6.750 | | | | | .0000 | .0000 | |
| 6.855 | | | .0000 | | | | |
| 6.942 | | | .0000 | | | | |
| 6.978 | | | .0000 | | | | |
| 9.056 | | | .0000 | | | | |
| 9.118 | | | .0000 | | | | |
| 9.222 | | | .0000 | | | | |
| 9.275 | | | .0000 | | | | |

MACH (1) = 8.000 BETA (2) = .000 TI = 97.350 QI = 3.942 WREF = .049
 SECTION (1) OMS POD

DEPENDENT VARIABLE HI/AD

| X/L | .7800 | .8050 | .8290 | .8620 | .9630 | 1.0000 | 1.0140 |
|-------|-------|-------|-------|-------|-------|--------|--------|
| Z | | | | | | | |
| 6.295 | .0362 | .1854 | .0991 | .0601 | .0000 | .0000 | .0000 |
| 6.540 | .0000 | .0000 | | | | | |
| 6.650 | .0000 | | | | | | |
| 6.727 | | .0000 | | | | | |
| 6.750 | | | | | .0000 | .0000 | |
| 6.855 | | .0000 | | | | | |
| 6.942 | | .0000 | | | | | |
| 6.978 | | .0000 | | | | | |
| 9.056 | | .0000 | | | | | |
| 9.118 | | .0000 | | | | | |
| 9.222 | | .0000 | | | | | |
| 9.275 | | .0000 | | | | | |

DATE 23 SEP 74

(RTKMO3) (25 APR 74)

TABULATED DATA LISTING FOR OH4B (AEDC VA332)

AEDC VA332 OH4B 015110 ORB. OH4B POD

REFERENCE DATA

YREF = .0238 80.0 FT. YREF = .0000 IN.
 LREF = 22.5803 IN. YREF = .0000 IN.
 SREF = 16.5919 IN. ZREF = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = -10.000 T1 = 93.425 Q1 = .020
 BETA = .000 RN/L = .000
 S.FLAP = .000 ELEVON = .000
 HAWAHT = 1.000

PARAMETRIC DATA

SECTION (1) OH4B POD

DEPENDENT VARIABLE H1/H0

X/L .7800 .8050 .8290 .8420 .8630 .8830 1.0000 1.0140

Z
 8.298 .2185 .1968 .0810 .0452 .0000 .0000 .0000
 8.540 .0000 .0000
 8.650 .0000
 8.727 .0000
 8.750 .0000 .0000 .0000
 8.855 .0000
 8.942 .0000
 8.978 .0000
 9.006 .0000
 9.119 .0000
 9.222 .0000
 9.275 .0000

MACH (1) = 8.000 ALPHA (2) = -6.000 T1 = 93.425 Q1 = .020

SECTION (1) OH4B POD

DEPENDENT VARIABLE H1/H0

X/L .7800 .8050 .8290 .8420 .8630 .8830 1.0000 1.0140

Z
 8.298 .0225 .0385 .0376 .0404 .0000 .0000 .0000
 8.540 .0000
 8.650 .0000
 8.727 .0000
 8.750 .0000 .0000 .0000
 8.855 .0000
 8.942 .0000
 8.978 .0000
 9.006 .0000
 9.119 .0000
 9.222 .0000
 9.275 .0000

DATE 23 SEP 74 TABULATED DATA LISTING FOR OHB (AEDC VAS32)

MACH (1) = 8.000 ALPHA (3) = .000 TI = 93.425 QI = .682 HREF = .020 (RTK403)

SECTION (1) OHB POD DEPENDENT VARIABLE H1/H0

| X/A | .7800 | .8050 | .8250 | .8620 | .9630 | 1.0000 | 1.0140 |
|-------|-------|-------|-------|-------|-------|--------|--------|
| Z | | | | | | | |
| 8.298 | .0107 | .0256 | .0821 | .0359 | .0000 | .0000 | .0000 |
| 8.340 | | .0000 | | | | | |
| 8.650 | | .0000 | | | | | |
| 8.727 | | | .0000 | | | | |
| 8.750 | | | | | .0000 | .0000 | .0000 |
| 8.855 | | | | .0000 | | | |
| 8.942 | | | .0000 | | | | |
| 8.979 | | | | .0000 | .0000 | | |
| 9.069 | | | | .0000 | | | |
| 9.118 | | | | .0000 | | | |
| 9.220 | | | | | .0000 | .0000 | |
| 9.275 | | | | | .0000 | | |

MACH (1) = 8.000 ALPHA (4) = 5.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1) OHB POD DEPENDENT VARIABLE H1/H0

| X/A | .7800 | .8050 | .8250 | .8620 | .9630 | 1.0000 | 1.0140 |
|-------|-------|-------|-------|-------|-------|--------|--------|
| Z | | | | | | | |
| 8.298 | .0039 | .0119 | .0236 | .0249 | .0000 | .0000 | .0000 |
| 8.340 | | .0000 | | | | | |
| 8.650 | | .0000 | | | | | |
| 8.727 | | | .0000 | | | | |
| 8.750 | | | | | .0000 | .0000 | |
| 8.855 | | | | .0000 | | | |
| 8.942 | | | .0000 | | | | |
| 8.979 | | | | .0000 | .0000 | | |
| 9.069 | | | | .0000 | | | |
| 9.118 | | | | .0000 | | | |
| 9.222 | | | | | .0000 | .0000 | |
| 9.275 | | | | | .0000 | | |

DATE 23 SEP 74

TABULATED DATA LISTING FOR OM4B (AEDC V4352)

PAGE 429

AEDC V4352 OM4B 01-T10 ORB. OMS POD

(RTKMO4) (25 APR 74)

REFERENCE DATA

XREF = .0236 SQ.FT. XMRP = .0000 IN.
 YREF = 22.3603 IN. YMRP = .0000 IN.
 ZREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 RM/L = .680
 9.FLAP = .000 ELEVON = .000
 HAW/MT = .000

MACH (1) = 8.000 BETA (1) = -2.000 T1 = 93.550 Q1 = .681 WREF = .020

SECTION (1) OMS POD DEPENDENT VARIABLE HI/40

X/L .7600 .8050 .8290 .8620 .9630 1.0000 1.0140

Z
 8.298 .0234 .1622 .1126 .0626 .0000 .0000 .0000
 8.340 .0000 .0000 .0000 .0000 .0000 .0000 .0000
 8.650 .0000 .0000 .0000 .0000 .0000 .0000 .0000
 8.727 .0000 .0000 .0000 .0000 .0000 .0000 .0000
 8.750 .0000 .0000 .0000 .0000 .0000 .0000 .0000
 8.855 .0000 .0000 .0000 .0000 .0000 .0000 .0000
 8.942 .0000 .0000 .0000 .0000 .0000 .0000 .0000
 9.056 .0000 .0000 .0000 .0000 .0000 .0000 .0000
 9.116 .0000 .0000 .0000 .0000 .0000 .0000 .0000
 9.222 .0000 .0000 .0000 .0000 .0000 .0000 .0000
 9.275 .0000 .0000 .0000 .0000 .0000 .0000 .0000

MACH (1) = 8.000 BETA (2) = .571 T1 = 93.550 Q1 = .681 WREF = .020

SECTION (1) OMS POD DEPENDENT VARIABLE HI/40

X/L .7600 .8050 .8290 .8620 .9630 1.0000 1.0140

Z
 8.295 .0107 .0295 .0421 .0399 .0000 .0000 .0000
 8.340 .0000 .0000 .0000 .0000 .0000 .0000 .0000
 8.650 .0000 .0000 .0000 .0000 .0000 .0000 .0000
 8.727 .0000 .0000 .0000 .0000 .0000 .0000 .0000
 8.750 .0000 .0000 .0000 .0000 .0000 .0000 .0000
 8.855 .0000 .0000 .0000 .0000 .0000 .0000 .0000
 8.942 .0000 .0000 .0000 .0000 .0000 .0000 .0000
 9.056 .0000 .0000 .0000 .0000 .0000 .0000 .0000
 9.116 .0000 .0000 .0000 .0000 .0000 .0000 .0000
 9.222 .0000 .0000 .0000 .0000 .0000 .0000 .0000
 9.275 .0000 .0000 .0000 .0000 .0000 .0000 .0000

DATE 23 SEP 74

TABULATED DATA LISTING FOR CHS (AEDC VA382)

PAGE 43C

AEDC VA382 CHS 01 ORB. CHS MOD

(RTU410) (25 APR 74)

REFERENCE DATA

REF = .0238 30.0 FT. 140P = .0000 IN.
REF = 22.5003 IN. 140P = .0000 IN.
REF = 16.3918 IN. 240P = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 DN/L = 3.720
S.F.LAP = .000 ELEVATION = .000
HAWAHT = 1.000

MACH (1) = 8.000 ALPHA (1) = -4.000 TI = 98.800 Q1 = 3.981 WEF = .049

SECTION (1) CHS MOD

DEPENDENT VARIABLE HUAD

| X/L | 7800 | 8000 | 8200 | 8400 | 8600 | 8800 | 9000 | 9200 | 9400 | 9600 | 9800 | 1.0140 |
|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|--------|
| Z | | | | | | | | | | | | |
| 8.295 | .7832 | .1315 | .0736 | .0422 | .0134 | .0132 | .0122 | | | | | |
| 8.340 | | .2011 | | | | | | | | | | |
| 8.410 | | .2379 | | | | | | | | | | |
| 8.727 | | | .1109 | | | | | | | | | |
| 8.750 | | | | | | .0000 | .0193 | | | | | |
| 8.859 | | | | .0381 | | | | | | | | |
| 8.942 | | | .1001 | | | | | | | | | |
| 8.976 | | | | | .0172 | | | | | | | |
| 9.056 | | | | .0465 | | | | | | | | |
| 9.118 | | | | .0256 | | | | | | | | |
| 9.222 | | | | | .0420 | | | | | | | |
| 9.279 | | | | | .0177 | | | | | | | |

MACH (1) = 8.000 ALPHA (2) = .000 TI = 98.800 Q1 = 3.981 WEF = .049

SECTION (1) CHS MOD

DEPENDENT VARIABLE HUAD

| X/L | 7800 | 8000 | 8200 | 8400 | 8600 | 8800 | 9000 | 9200 | 9400 | 9600 | 9800 | 1.0140 |
|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|--------|
| Z | | | | | | | | | | | | |
| 8.295 | .0371 | .1084 | .0592 | .0291 | .0216 | .0312 | .0258 | | | | | |
| 8.340 | | .1939 | | | | | | | | | | |
| 8.410 | | .1929 | | | | | | | | | | |
| 8.727 | | | .1547 | | | | | | | | | |
| 8.750 | | | | | | .0000 | .0241 | | | | | |
| 8.859 | | | | .0517 | | | | | | | | |
| 8.942 | | | .1042 | | | | | | | | | |
| 8.976 | | | | | | | | | | | | |
| 9.056 | | | | .0499 | | | | | | | | |
| 9.118 | | | | .0518 | | | | | | | | |
| 9.222 | | | | | .0438 | | | | | | | |
| 9.279 | | | | | .0257 | | | | | | | |



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA332)

PAGE 431

(RTN111) (23 APR 74)

AEDC VA332 OMB 01 OMB, OMB MOD

REFERENCE DATA

SLEP = .0236 30.FT. WHP = .0000 IN.
 LREP = 22.5603 IN. WHP = .0000 IN.
 BREP = 16.3919 IN. ZHP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = -0.000 TI = 93.000 Q1 = .020 HREP = .020

PARAMETRIC DATA

BETA = .000 R1/L = .000
 S.FLAP = .000 ELEVON = .000
 HAW/MT = 1.000

DEPENDENT VARIABLE MU/MD

SECTION (1) OMB MOD

X/L .7600 .8000 .8250 .8420 .8630 1.0000 1.0140

Z

8.296 .0983 .0869 .0412 .0374 .0262 .0249 .0217
 8.340 .1311
 8.650 .2108
 8.727 .1236
 8.750 .0000 .0125
 8.855 .0558
 8.942 .0687
 8.976 .0160
 9.056 .0567
 9.118 .0249
 9.222 .0310
 9.275 .0110

MACH (1) = 8.000 ALPHA (2) = .000 TI = 93.000 Q1 = .020 HREP = .020

DEPENDENT VARIABLE MU/MD

SECTION (1) OMB MOD

X/L .7600 .8000 .8250 .8420 .8630 1.0000 1.0140

Z

8.296 .0086 .0278 .0514 .0420 .0211 .0231 .0176
 8.340 .0369
 8.650 .0270
 8.727 .0927
 8.750 .0000 .0166
 8.855 .0513
 8.942 .0336
 8.976 .0192
 9.056 .0165
 9.118 .0262
 9.222 .0239
 9.275 .0140

(RTIME12) (25 APR 74)

AEDC WA352 OHS Q1 OHS QHS PCD

REFERENCE DATA

SEF = .0236 33.71. 1MP = .0000 IN.
 SEP = 22.5603 IN. 1MP = .0000 IN.
 SEP = 16.3919 IN. 2MP = .0000 IN.
 SCALE = 5.775 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .000
 B.FLAP = .000 ELEVAT = .000
 HAW/NT = 1.000

WACH (1) = 6.000 ALPHA (1) = 25.000 TI = 93.400 Q1 = .524 HEP = .016

SECTION (1) OHS PCD DEPENDENT VARIABLE MU/NO

W/L .7600 .6050 .6250 .6620 .9630 1.0000 1.0140

Z
 6.295 .0049 .0223 .0392 .0326 .0109 .0115 .0090
 6.540 .0263
 6.650 .0211
 6.729 .0531
 6.750 .0000 .0100
 6.855 .0261
 6.942 .0162
 6.974 .0143
 9.056 .0026
 9.116 .0074
 9.222 .0087
 9.275 .0027

WACH (1) = 6.000 ALPHA (2) = 30.000 TI = 93.400 Q1 = .524 HEP = .016

SECTION (1) OHS PCD DEPENDENT VARIABLE MU/NO

W/L .7600 .6050 .6250 .6620 .9630 1.0000 1.0140

Z
 6.295 .0036 .0115 .0146 .0125 .0047 .0081 .0035
 6.540 .0133
 6.650 .0049
 6.729 .0226
 6.750 .0000 .0046
 6.855 .0171
 6.942 .0074
 6.974 .0072
 9.056 .0030
 9.116 .0039
 9.222 .0086
 9.275 .0036



TABLE 23 SEP 74 TABULATED DATA LISTING FOR OM48 (AEDC VA332)

| MACH (1) z | | 0.000 | ALPHA (3) z | 33.000 | TI z | 93.400 | Q1 z | .324 | WEEP z | .016 |
|---------------------|-------|---|-------------|--------|-------|--------|--------|--------|--------|------|
| SECTION (1) OM3 POD | | AEDC VA332 OM4B 01 OM8 OM3 POD (RTUM12) | | | | | | | | |
| X/L | | .7900 | .8030 | .8290 | .8820 | .9430 | 1.0000 | 1.0140 | | |
| Z | | DEPENDENT VARIABLE MU/MO | | | | | | | | |
| 8.298 | .0018 | .0031 | .0050 | .0059 | .0018 | .0022 | .0044 | | | |
| 8.340 | | .0040 | | | | | | | | |
| 8.830 | | .0035 | | | | | | | | |
| 8.727 | | | .0071 | | | | | | | |
| 8.750 | | | | | | .0000 | .0031 | | | |
| 8.855 | | | | | | | | | | |
| 8.942 | | | .0033 | | | | | | | |
| 8.978 | | | | | | .0036 | | | | |
| 9.096 | | | | .0045 | | | | | | |
| 9.116 | | | | .0026 | | | | | | |
| 9.222 | | | | | | .0042 | | | | |
| 9.275 | | | | | | .0026 | | | | |

(RTM13) (25 APR 74)

AEDC VAS32 OH8 01 OH8 MOD

REFERENCE DATA

REF = .0236 33.71. WHP = .0000 IN.
 REF = 22.5803 IN. WHP = .0000 IN.
 REF = 16.3916 IN. WHP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .0000 IN. = 1.0000
 B.FLAP = .0000 ELEVATION = .0000
 MAX/HT = 1.0000

MACH (1) = 0.000 ALPHA (1) = 30.000 γ_1 = 94.100 ϕ_1 = 1.000 HREF = .025

SECTION (1) OH8 MOD DEPENDENT VARIABLE MU/MO

X/C .7800 .6050 .0250 .0420 .9830 1.0000 1.0140

Z
 0.298 .0043 .0149 .0164 .0146 .0044 .0041 .0031
 0.340 .0177
 0.490 .0121
 0.727 .0266
 0.750 .0043
 0.895 .0207
 0.942 .0076
 0.996 .0027
 0.998 .0041
 0.999 .0036
 0.999 .0035

MACH (1) = 0.000 ALPHA (2) = 35.000 γ_1 = 94.100 ϕ_1 = 1.000 HREF = .025

SECTION (1) OH8 MOD DEPENDENT VARIABLE MU/MO

X/C .7800 .6050 .0250 .0420 .9830 1.0000 1.0140

Z
 0.298 .0016 .0020 .0032 .0039 .0016 .0019 .0042
 0.340 .0027
 0.490 .0034
 0.727 .0050
 0.750 .0041
 0.895 .0077
 0.942 .0036
 0.996 .0037
 0.998 .0027
 0.999 .0030
 0.999 .0024

DATE 23 SEP 74

TABULATED DATA LISTING FOR OH4B (AEDC VA352)

PAGE 435

MACH (1) = 8.000 ALPHA (3) = 40.000 OH4B 01 OH4B OH4B POO (RTM13)
 = 1.003 WREF = .025

SECTION (1) OH4B POO DEPENDENT VARIABLE HU/HO

X/L .7800 .8050 .8290 .8620 .8830 1.0000 1.0140

| | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Z | 6.295 | .0016 | .0024 | .0034 | .0049 | .0014 | .0045 | .0071 |
| 6.340 | | .0035 | | | | | | |
| 6.630 | | .0055 | | | | | | |
| 6.727 | | | | | | | | |
| 6.750 | | | | | | | .0000 | .0082 |
| 6.803 | | | | .0046 | | | | |
| 6.942 | | | .0073 | | | | | |
| 6.976 | | | | | | .0053 | | |
| 9.056 | | | | .0117 | | | | |
| 9.118 | | | | .0047 | | | | |
| 9.222 | | | | | | .0055 | | |
| 9.275 | | | | | | .0057 | | |



DATE 23 SEP 74

TABULATED DATA LISTING FOR CH4B (AEDC VA332)

PAGE 436

AEDC VA332 CH4B 01 ORB, CH4B P00

(RTK414) (23 APR 74)

REFERENCE DATA

SEP = .0238 SQ.FT. XMRP = .0000 IN.
 ZEP = 22.5503 IN. XMRP = .0000 IN.
 SEP = 16.3513 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .5000 RV/L = 2.0000
 B.FLAP = .0000 ELLIPSON = .0000
 HAW/HT = 1.0000

MACH (1) = 8.0000 ALPHA (1) = 30.0000 TI = 99.950 Q1 = 1.994 HREF = .035

SECTION (1) CH4B P00

DEPENDENT VARIABLE MU/HO

X/L .7800 .8000 .8200 .8400 .8600 .8800 .9000 .9200 .9400 .9600 .9800 1.0000 1.0140

Z
 8.295 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 8.340 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 8.380 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 8.420 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 8.460 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 8.500 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 8.540 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 8.580 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 8.620 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 8.660 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 8.700 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 8.740 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 8.780 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 8.820 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 8.860 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 8.900 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 8.940 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 8.980 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 9.020 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 9.060 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 9.100 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 9.140 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 9.180 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 9.220 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 9.260 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241
 9.300 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241 .0241

MACH (1) = 8.0000 ALPHA (2) = 35.0000 TI = 99.950 Q1 = 1.994 HREF = .035

SECTION (1) CH4B P00

DEPENDENT VARIABLE MU/HO

X/L .7800 .8000 .8200 .8400 .8600 .8800 .9000 .9200 .9400 .9600 .9800 1.0000 1.0140

Z
 8.295 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 8.340 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 8.380 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 8.420 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 8.460 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 8.500 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 8.540 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 8.580 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 8.620 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 8.660 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 8.700 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 8.740 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 8.780 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 8.820 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 8.860 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 8.900 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 8.940 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 8.980 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 9.020 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 9.060 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 9.100 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 9.140 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 9.180 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 9.220 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 9.260 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034
 9.300 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034 .0034



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC V4332)

(RTM15) (29 APR 74)

AEDC V4332 OMB Q1 ORB, OMB P00

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
 B.FLAP = .000 ELEVON = .000
 HAWAHT = 1.000

REFERENCE DATA

REF = .0238 SQ.FT. XMP = .0000 IN.
 LREF = 22.903 IN. MP = .0000 IN.
 REF = 16.3919 IN. ZMP = .0000 IN.
 SCALE = .0175 SCALE

WACH (1) = 6.000 ALPHA (1) = 25.000 TI = 97.887 Q1 = 3.995 HREF = .049

SECTION (1) OMB P00

DEPENDENT VARIABLE HU/MD

X/L .7800 .8050 .8250 .8420 .8630 1.0000 1.0140

Z
 8.295 .0250 .0541 .0681 .0887 .0310 .0232
 8.340 .0680
 8.650 .0482
 8.727 .0530
 8.750 .0000 .0134
 9.695 .0243
 9.942 .0158
 9.978 .0087
 9.995 .0042
 9.119 .0048
 9.222 .0057
 9.275 .0059

WACH (1) = 6.000 ALPHA (2) = 30.000 TI = 97.887 Q1 = 3.995 HREF = .049

SECTION (1) OMB P00

DEPENDENT VARIABLE HU/MD

X/L .7800 .8050 .8250 .8420 .8630 1.0000 1.0140

Z
 8.295 .0250 .0541 .0681 .0887 .0310 .0232
 8.340 .0680
 8.650 .0482
 8.727 .0530
 8.750 .0000 .0134
 9.695 .0243
 9.942 .0158
 9.978 .0087
 9.995 .0042
 9.119 .0048
 9.222 .0057
 9.275 .0059

DATE 23 SEP 74

TABULATED DATA LISTING FOR OMIB (AEDC VA352)

PAGE 436

MACH (1) = 8.000 ALPHA (3) = 35.000 AEDC VA352 OMIB C1 ORB. OMIB PCD (RTN13)
 TI = 97.867 Q1 = 3.355 HREF = .049

SECTION (1) OMIB PCD DEPENDENT VARIABLE HU/HO

| X/L | .7800 | .8050 | .8290 | .8620 | .9630 | 1.0000 | 1.0140 |
|-------|-------|-------|-------|-------|-------|--------|--------|
| 2 | | | | | | | |
| 8.295 | .0067 | .0043 | .0082 | .0256 | .0047 | .0041 | .0036 |
| 8.540 | | .0066 | | | | | |
| 8.650 | | .0084 | | | | | |
| 8.727 | | | .0123 | | | | |
| 8.750 | | | | | .0000 | .0044 | |
| 8.855 | | | .0079 | .0178 | | | |
| 8.942 | | | | | .0104 | | |
| 8.978 | | | | .0078 | | | |
| 9.056 | | | | .0036 | | | |
| 9.118 | | | | | .0023 | | |
| 9.222 | | | | | .0025 | | |
| 9.275 | | | | | | | |



DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-8 (AEDC VA352)

(RTM417) (25 APR 74)

AEDC VA352 OH-8 01 ORB. OH-8 POD

REFERENCE DATA

STEP = .8236 SQ.FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. YMRP = .0000 IN.
 BREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
 B.P.LAP = 10.000 ELEVON = 5.000
 HAM/MT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.700 QI = 3.949 HREF = .049

SECTION (1) OH-8 POD DEPENDENT VARIABLE MU/HO

X/L .7800 .8050 .8290 .8620 .9630 1.0000 1.0140

Z
 8.295 .0322 .1036 .0611 .0646 .0097 .0098 .0083
 8.540 .0806
 8.650 .0365
 8.727 .0639
 8.750 .0000 .0124
 8.953 .0166
 8.942 .0139
 8.979 .0159
 9.036 .0112
 9.119 .0042
 9.222 .0089
 9.275 .0040

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.700 QI = 3.949 HREF = .049

SECTION (1) OH-8 POD DEPENDENT VARIABLE MU/HO

X/L .7800 .8050 .8290 .8620 .9630 1.0000 1.0140

Z
 8.295 .0068 .0049 .0067 .0251 .0052 .0071 .0086
 8.540 .0076
 8.650 .0099
 8.727 .0133
 8.750 .0000 .0072
 8.953 .0181
 8.942 .0082
 8.979 .0110
 9.036 .0076
 9.119 .0036
 9.222 .0026
 9.275 .0026



(RTNMI8) (25 APR 74)

AEDC VA352 OMB O1 OMB, OMS POD

PARAMETRIC DATA

BETA = -5.000 RM/L = 3.720
 B.FLAP = 10.000 ELEVON = 5.000
 HAW/HT = 1.000

REFERENCE DATA

REF = .0236 SQ.FT. XMRP = .0000 IN.
 REF = 22.9803 IN. XMRP = .0000 IN.
 REF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

WACH (1) = 5.000 ALPHA (1) = 30.000 TI = 97.200 Q1 = 3.933 HREF = .049

DEPENDENT VARIABLE HU/HO

SECTION (1) OMS POD

| X/L | .7800 | .8050 | .8290 | .8480 | .8630 | 1.0000 | 1.0140 |
|-------|-------|-------|-------|-------|-------|--------|--------|
| Z | | | | | | | |
| 8.299 | .0960 | .1628 | .5937 | .0641 | .0154 | .0142 | .0102 |
| 8.340 | | .1177 | | | | | |
| 8.450 | | .0637 | | | | | |
| 8.727 | | | .0817 | | | | |
| 8.750 | | | | .0000 | .0081 | | |
| 8.855 | | | .0320 | | | | |
| 9.042 | | | .0249 | | .0102 | | |
| 9.978 | | | .0037 | | | | |
| 9.056 | | | .0086 | | | | |
| 9.118 | | | | .0037 | | | |
| 9.222 | | | | .0040 | | | |
| 9.275 | | | | | | | |

WACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.200 Q1 = 3.933 HREF = .049

DEPENDENT VARIABLE HU/HO

SECTION (1) OMS POD

| X/L | .7800 | .8050 | .8290 | .8480 | .8630 | 1.0000 | 1.0140 |
|-------|-------|-------|-------|-------|-------|--------|--------|
| Z | | | | | | | |
| 8.299 | .0293 | .1272 | .0882 | .0713 | .0209 | .0198 | .0166 |
| 8.340 | | .0885 | | | | | |
| 8.450 | | .0377 | | | | | |
| 8.727 | | | .0668 | | | .0000 | .0177 |
| 8.750 | | | | .0229 | | | |
| 8.855 | | .0136 | | | | | |
| 9.042 | | | | | .0160 | | |
| 9.978 | | | | .0077 | | | |
| 9.056 | | | | .0046 | | | |
| 9.118 | | | | | .0030 | | |
| 9.222 | | | | | .0024 | | |
| 9.275 | | | | | | | |



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AFDC VA332)

PAGE 441

AFDC VA332 OMB Q1 OMB, OMB POC

(RTKM19) (25 APR 74)

REFERENCE DATA

REF = .8238 SQ.FT. KMP = .0000 IN.
REF = 22.5603 IN. KMP = .0000 IN.
REF = 16.3919 IN. KMP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 2.000
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = 1.000

MACH (1) = 0.000 ALPHA (1) = 30.000 TI = 95.650 Q1 = 1.983 HREF = .035

SECTION (1) OMB POC

DEPENDENT VARIABLE MU/DO

| X/L | Y/L | Z |
|-------|-------|-------|
| 0.295 | .0482 | .1219 |
| 0.340 | .0693 | .0317 |
| 0.390 | .0829 | .0106 |
| 0.427 | .0672 | .0191 |
| 0.470 | .0312 | .0153 |
| 0.495 | .0203 | .0000 |
| 0.542 | .0080 | .0076 |
| 0.578 | .0064 | .0092 |
| 0.606 | .0061 | .0080 |
| 0.618 | .0044 | .0064 |
| 0.622 | | |
| 0.675 | | |

MACH (1) = 0.000 ALPHA (2) = 35.000 TI = 95.650 Q1 = 1.983 HREF = .035

SECTION (1) OMB POC

DEPENDENT VARIABLE MU/DO

| X/L | Y/L | Z |
|-------|-------|-------|
| 0.295 | .0642 | .1335 |
| 0.340 | .0923 | .0680 |
| 0.390 | .0469 | .0410 |
| 0.427 | .0569 | .0389 |
| 0.470 | .0185 | .0337 |
| 0.495 | .0182 | .0253 |
| 0.542 | .0070 | .0000 |
| 0.578 | .0065 | .0155 |
| 0.606 | .0036 | .0101 |
| 0.618 | .0033 | .0070 |
| 0.622 | | .0065 |
| 0.675 | | .0036 |
| | | .0033 |



(RTIME20) (25 APR 74)

AEDC VA352 OMB 01 ORB. OMS MOD

REFERENCE DATA

REF = .8238 SQ.FT. XMRP = .0000 IN.
 REF = 22.9803 IN. YMRP = .0000 IN.
 REF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .0000 RN/L = 2.000
 B.F.LAP = 10.000 ELEVON = 5.000
 HAW/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.900 QI = 1.980 HREF = .035

DEPENDENT VARIABLE HU/HO

SECTION (1) OMS MOD

X/L .7800 .8080 .8290 .8620 .9630 1.0000 1.0140

Z

8.234 .0046 .0239 .0301 .0247 .0032 .0046 .0035
 8.540 .0322
 8.850 .0236
 8.727 .0429
 8.750 .0000 .0043
 8.855 .0284
 8.942 .0177
 8.978 .0108
 9.046 .0084
 9.119 .0053
 9.222 .0044
 9.275 .0034

MACH (1) = 8.000 ALPHA (2) = 39.000 TI = 95.900 QI = 1.980 HREF = .035

DEPENDENT VARIABLE HU/HO

SECTION (1) OMS MOD

X/L .7800 .8080 .8290 .8620 .9630 1.0000 1.0140

Z

8.234 .0042 .0041 .0038 .0061 .0036 .0039 .0060
 8.540 .0065
 8.850 .0100
 8.727 .0061
 8.750 .0000 .0039
 8.855 .0067
 8.942 .0069
 8.978 .0070
 9.046 .0093
 9.119 .0045
 9.222 .0034
 9.275 .0036

DATE 23 SEP 74

TABULATED DATA LISTING FOR Q4B (AEDC V4332)

PAGE 443

AEDC V4332 Q4B 01 QRE. QMS POD

(RTM021) (25 APR 74)

REFERENCE DATA

STEP 2 .8236 33.71. XREF = .0000 IN.
 XREF = 22.9803 IN. XREF = .0000 IN.
 XREF = 16.3919 IN. XREF = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -9.000 IN/L = .500
 SFLAP = 10.000 ELEVON = 9.000
 HAWAHT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 91.990 QI = .518 HREF = .017

SECTION (1) QMS POD DEPENDENT VARIABLE MU/NO

X/L .7800 .8050 .8290 .8520 .8730 1.0000 1.0140

Z
 8.295 .0250 .0907 .0845 .0829 .0517 .0465 .0358
 8.940 .0791 .0504
 8.650 .0666
 8.727
 8.750 .0318 .0000 .0171
 8.855 .0252
 8.942 .0119
 8.978 .0040
 9.056 .0083
 9.118 .0048
 9.222 .0034
 9.275

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 91.990 QI = .518 HREF = .017

SECTION (1) QMS POD DEPENDENT VARIABLE MU/NO

X/L .7800 .8050 .8290 .8520 .8730 1.0000 1.0140

Z
 8.295 .0145 .0871 .0704 .0612 .0242 .0181 .0130
 8.940 .0838 .0335
 8.650 .0266
 8.727
 8.750 .0253 .0000 .0172
 8.855 .0213
 8.942 .0174
 8.978 .0039
 9.056 .0078
 9.118 .0036
 9.222 .0029
 9.275

(RTM22) (25 APR 74)

REFERENCE DATA

REF = .0238 34. FT. INCH = .0000 IN.
 REF = 22.5803 IN. INCH = .0000 IN.
 REF = 16.3919 IN. INCH = .0000 IN.
 SCALE = .0195 SCALE

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 93.400 QI = .923 HREF = .018

SECTION (1) OMB MOD DEPENDENT VARIABLE MU/AC

X/Y .7600 .8000 .8290 .8820 .9430 1.0000 1.0140

Z
 8.254 .0043 .0112 .0123 .0114 .0047 .0049 .0049
 8.340 .0126
 8.650 .0094
 8.727 .0191
 8.750 .0000 .0003
 8.804 .0133
 8.842 .0080
 8.974 .0037 .0070
 9.025 .0042
 9.116 .0064
 9.222 .0038
 9.275

MACH (1) = 8.000 ALPHA (2) = 33.000 TI = 93.400 QI = .923 HREF = .018

SECTION (1) OMB MOD DEPENDENT VARIABLE MU/AC

X/Y .7600 .8000 .8290 .8820 .9430 1.0000 1.0140

Z
 8.254 .0021 .0029 .0046 .0060 .0021 .0024 .0016
 8.340 .0034
 8.650 .0031
 8.727 .0063
 8.750 .0000 .0029
 8.804 .0075
 8.842 .0034
 8.974 .0031
 9.025 .0042
 9.116 .0031
 9.222 .0042
 9.275 .0009

PARAMETRIC DATA

BETA = .000 R/V = .500
 S.F.LAP = 10.000 ELEVON = 9.000
 HAWAHT = 1.000

(RTN423) (25 APR 74)

AEDC 1332 OH-8 Q1 Q28, OH-8 P00

REFERENCE DATA

REF = .0236 SQ.FT. MIP = .0000 IN.
 REF = 22.5603 IN. MIP = .0000 IN.
 REF = 16.3913 IN. MIP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
 B.FLAP = 10.000 ELEVON = 10.000
 HAW/HT = 1.000

MACH (1) = 0.000 ALPHA (1) = 29.000 TI = 93.433 Q1 = .321 HREF = .016

SECTION (1) OH-8 P00 DEPENDENT VARIABLE MU/40

X/L .7600 .8050 .8290 .8820 .9630 1.0000 1.0140

Z
 0.296 .0046 .0222 .0356 .0321 .0116 .0107 .0079
 0.540 .0276
 0.650 .0209
 0.727 .0521
 0.750 .0086
 0.855 .0279
 0.942 .0163
 0.976 .0139
 0.986 .0026
 0.116 .0074
 0.222 .0057
 0.275 .0026

MACH (1) = 0.000 ALPHA (2) = 30.000 TI = 93.433 Q1 = .321 HREF = .016

SECTION (1) OH-8 P00 DEPENDENT VARIABLE MU/40

X/L .7600 .8050 .8290 .8820 .9630 1.0000 1.0140

Z
 0.296 .0042 .0116 .0135 .0131 .0049 .0046 .0039
 0.540 .0136
 0.650 .0099
 0.727 .0215
 0.750 .0049
 0.855 .0172
 0.942 .0076
 0.976 .0076
 0.034
 0.041
 0.048
 0.036

DATE 23 SEP 74

TABULATED DATA LISTING FOR OM48 (AEDC V4352)

PAGE 446

(RTM423)

WACH (1) = 0.000 ALPHA (3) = 35.000 Y1 = 93.433 Q1 = .5 = .510

SECTION (1) OM48 POC

DEPENDENT VARIABLE MU/MD

| Y/L | .7800 | .8000 | .8200 | .8400 | .8600 | .8800 | .9000 | .9200 | .9400 | .9600 | .9800 | 1.0000 | 1.0140 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| 2 | | | | | | | | | | | | | |
| 0.255 | .0020 | .0030 | .0046 | .0056 | .0066 | .0074 | .0080 | .0086 | .0090 | .0092 | | | |
| 0.340 | | | | | | | | | | | | | |
| 0.430 | .0037 | | | | | | | | | | | | |
| 0.520 | .0035 | | | | | | | | | | | | |
| 0.610 | | | .0068 | | | | | | | | | | |
| 0.700 | | | | | | | | | | | | | |
| 0.790 | | | | .0035 | | | | | | | | | |
| 0.880 | | | | | .0074 | | | | .0000 | .0082 | | | |
| 0.970 | | | | | | | | | | | | | |
| 1.060 | | | | | | | | | | | | | |
| 1.150 | | | | | | | | | .0030 | | | | |
| 1.240 | | | | | .0049 | | | | | | | | |
| 1.330 | | | | | .0029 | | | | | | | | |
| 1.420 | | | | | | | | | .0044 | | | | |
| 1.510 | | | | | | | | | .0029 | | | | |

MACH (1) = 8.000 ALPHA (3) = 35.000 Y1 = 93.233 Q1 = .323 HREF = .018
 (RTN424)

SECTION (1) QMS POD

DEPENDENT VARIABLE MU/NO

| 1/2 | .7800 | .8050 | .8250 | .8420 | .8630 | 1.0000 | 1.0140 |
|-------|-------|-------|-------|-------|-------|--------|--------|
| 2 | | | | | | | |
| 6.298 | .0157 | .0836 | .0732 | .0837 | .0187 | .0179 | .0154 |
| 6.340 | | .0832 | | | | | |
| 6.650 | | .0334 | | | | | |
| 6.727 | | | .0856 | | | | |
| 6.750 | | | | | .0000 | .0187 | |
| 6.893 | | | | .0235 | | | |
| 6.942 | | | .0207 | | | | |
| 6.978 | | | | | .0175 | | |
| 9.056 | | | .0037 | | | | |
| 9.118 | | | .0077 | | | | |
| 9.222 | | | | | .0036 | | |
| 9.275 | | | | | .0084 | | |



DATE 23 SEP 74

TABULATED DATA LISTING FOR OHB (AEDC VAS32)

PAGE 449

(RTN25) (25 APR 74)

AEDC VAS32 OHB Q1 ORB OHB P00

REFERENCE DATA

REF = .9236 SQ.FT. XREF = .0000 IN.
 LREF = 22.3803 IN. YREF = .0000 IN.
 SREF = 15.3919 IN. ZREF = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RV/L = 2.000
 S.FLAP = 10.000 ELEVON = 10.000
 HAW/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 Y1 = 94.650 Q1 = 1.985 HREF = .035

SECTION (1) OHB P00

DEPENDENT VARIABLE HU/HO

X/L .7800 .8050 .8250 .8620 .9630 1.0000 1.0140

Z

8.295 .0052 .0231 .0302 .0240 .0058 .0044 .0040
 8.540 .0312
 8.650 .0231
 8.727 .0430
 8.750
 8.853 .0256
 8.942 .0173
 8.978 .0112
 9.056 .0063
 9.118 .0049
 9.222 .0045
 9.275 .0033

MACH (1) = 8.000 ALPHA (2) = 35.000 Y1 = 94.650 Q1 = 1.985 HREF = .035

SECTION (1) OHB P00

DEPENDENT VARIABLE HU/HO

X/L .7800 .8050 .8250 .8620 .9630 1.0000 1.0140

Z

8.295 .0052 .0035 .0036 .0062 .0036 .0038 .0146
 8.540 .0062
 8.650 .0097
 8.727 .0061
 8.750
 8.853 .0054
 8.942 .0071
 8.978 .0099
 9.056 .0045
 9.118 .0034
 9.222 .0034
 9.275

DATE 23 SEP 74

TABULATED DATA LISTING FOR QMB (AEDC VAB32)

PAGE 430

AEDC VAB32 QMB 01 ORB, QMB POD

(RTN488) (23 APR 74)

REFERENCE DATA

STEP = .8238 SQ.FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. YMRP = .0000 IN.
 GREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = 7175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 2.000
 S.FLAP = 10.000 ELEVON = 10.000
 HAW/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 γ_1 = 95.450 Q1 = 1.983 HREF = .035

SECTION (1) QMB POD DEPENDENT VARIABLE HU/HO

| X/L | .7800 | .8050 | .8290 | .8620 | .9630 | 1.0000 | 1.0140 |
|-------|-------|-------|-------|-------|-------|--------|--------|
| Z | | | | | | | |
| 6.296 | .0476 | .1223 | .0738 | .0316 | .0134 | .0166 | .0136 |
| 6.540 | | .0899 | | | | | |
| 6.650 | | .0616 | | | | | |
| 6.727 | | | .0665 | | | | |
| 6.750 | | | | | .0000 | .0079 | |
| 6.855 | | | | .0306 | | | |
| 6.942 | | | .0200 | | | | |
| 6.978 | | | | .0099 | | | |
| 9.056 | | | .0067 | | | | |
| 9.118 | | | .0067 | | | | |
| 9.222 | | | | .0062 | | | |
| 9.275 | | | | .0042 | | | |

MACH (1) = 8.000 ALPHA (2) = 35.000 γ_1 = 96.450 Q1 = 1.983 HREF = .035

SECTION (1) QMB POD DEPENDENT VARIABLE HU/HO

| X/L | .7800 | .8050 | .8290 | .8620 | .9630 | 1.0000 | 1.0140 |
|-------|-------|-------|-------|-------|-------|--------|--------|
| Z | | | | | | | |
| 6.296 | .0871 | .1357 | .0665 | .0349 | .0393 | .0342 | .0263 |
| 6.540 | | .0887 | | | | | |
| 6.650 | | .0499 | | | | | |
| 6.727 | | | .0686 | | | | |
| 6.750 | | | | | .0000 | .0145 | |
| 6.855 | | | .0166 | | | | |
| 6.942 | | .0193 | | | | | |
| 6.978 | | | .0085 | | .0094 | | |
| 9.056 | | | .0067 | | | | |
| 9.118 | | | | | .0039 | | |
| 9.222 | | | | | .0035 | | |
| 9.275 | | | | | | | |

AEDC VA352 OH48 Q1 ORB OH2 POD

(RTN27) (25 APR 74)

REFERENCE DATA

STEP = .0236 3d.F.T. XMRP = .0300 IN.
 REF = 22.5903 IN. YMRP = .0300 IN.
 REF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
 S.F.LAP = 10.000 ELEVON = 10.000
 MAX/MT = 1.000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.367 Q1 = 3.936 HREF = .049
 X/L = .7800 .8000 .8200 .8420 .8620 .8830 1.0000 1.0140

SECTION (1) OH48 POD

DEPENDENT VARIABLE MU/MD

X/L = .7800 .8000 .8200 .8420 .8620 .8830 1.0000 1.0140

Z
 8.295 .0255 .0958 .0574 .0256 .0222 .0312 .0254
 8.540 .0877
 8.650 .0487
 8.727 .0544
 8.750 .0000 .0115
 8.855 .0246
 8.942 .0163
 8.978 .0092
 9.056 .0042
 9.118 .0051
 9.222 .0081
 9.275 .0031

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.367 Q1 = 3.936 HREF = .049
 X/L = .7800 .8000 .8200 .8420 .8620 .8830 1.0000 1.0140

SECTION (1) OH48 POD

DEPENDENT VARIABLE MU/MD

X/L = .7800 .8000 .8200 .8420 .8620 .8830 1.0000 1.0140

Z
 8.295 .0324 .0834 .0527 .0619 .0088 .0034 .0088
 8.540 .0850
 8.650 .0387
 8.727 .0871
 8.750 .0000 .0093
 8.855 .0181
 8.942 .0144
 8.978 .0171
 9.056 .0109
 9.118 .0044
 9.222 .0082
 9.275 .0039



DATE 23 SEP 74

TABULATED DATA LISTING FOR OHB (AEDC VA392)

PAGE 452

(RTU427)

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.387 Q1 = 3.936 HREF = .049

SECTION (1) OHB POD DEPENDENT VARIABLE MU/40

| X/- | .7800 | .8000 | .8200 | .8400 | .8600 | .8800 | .9000 | .9200 | .9400 | .9600 | .9800 | 1.0000 | 1.0140 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| Z | | | | | | | | | | | | | |
| 8.295 | .0037 | .0073 | .0080 | .0235 | .0051 | .0111 | .0173 | | | | | | |
| 8.340 | | .0068 | | | | | | | | | | | |
| 8.650 | | .0082 | | | | | | | | | | | |
| 8.727 | | | .0111 | | | | | | | | | | |
| 8.750 | | | | | | .0000 | .0063 | | | | | | |
| 8.835 | | | | .0184 | | | | | | | | | |
| 8.942 | | | .0077 | | | | | | | | | | |
| 8.978 | | | | | .0097 | | | | | | | | |
| 9.055 | | | .0078 | | | | | | | | | | |
| 9.116 | | | .0036 | | | | | | | | | | |
| 9.222 | | | | | .0025 | | | | | | | | |
| 9.275 | | | | | .0026 | | | | | | | | |



DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-8 (AEDC VA352)

PAGE 453

AEDC VA352 OH-8 Q1 ORB. OH-8 P00

(RTM28) (25 APR 74)

REFERENCE DATA

PARAMETRIC DATA

REF = .8238 30.FT. XMRP = .0000 IN.
 LIFT = 22.5803 IN. YMRP = .0000 IN.
 BPF = 16.5919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE
 BETA = -6.000 RN/L = 3.720
 8.FLAP = 10.000 ELEVON = 10.000
 HAW/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.300 Q1 = 3.930 WREF = .049
 SECTION (1) OH-8 P00 DEPENDENT VARIABLE HU/HO

X/L .7600 .8050 .8290 .8420 .8630 1.0000 1.0140

Z
 8.298 .0564 .1397 .0840 .0516 .0174 .0165 .0180
 8.540 .1131
 8.650 .0636
 8.727 .0751
 8.757 .0000 .0111
 8.855 .0352
 8.942 .0232
 8.978 .0118
 9.056 .0036
 9.118 .0063
 9.222 .0050
 9.275 .0029

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.300 Q1 = 3.930 WREF = .049
 SECTION (1) OH-8 P00 DEPENDENT VARIABLE HU/HO

X/L .7600 .8050 .8290 .8420 .8630 1.0000 1.0140

Z
 8.298 .0393 .1188 .0747 .0396 .0178 .0180 .0153
 8.540 .0467
 8.650 .0496
 8.727 .0656
 8.750 .0000 .0103
 8.855 .0237
 8.942 .0199
 8.978 .0067
 9.056 .0081
 9.118 .0081
 9.222 .0049
 9.275 .0046



DATE 23 SEP 74

TABULATED DATA LISTING FOR OHB (AEDC VA352)

PAGE 494

MACH (1) = 0.000 ALPHA (3) = 35.000 AEDC VA352 OHB 01 ORB. OHS POD (RTW28)
 = 97.300 Q1 = 3.930 HREF = .049

SECTION (1) OHS POD DEPENDENT VARIABLE HU/HD

| X/L | .7800 | .8000 | .8200 | .8400 | .8600 | .8800 | .9000 | .9200 | .9400 | .9600 | .9800 | 1.0000 | 1.0140 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| Z | | | | | | | | | | | | | |
| 8.295 | .0514 | .1044 | .0665 | .0374 | .0317 | .0363 | .0298 | | | | | | |
| 8.340 | .0767 | | | | | | | | | | | | |
| 8.650 | .0457 | | | | | | | | | | | | |
| 8.727 | | | .0843 | | | | | | | | | | |
| 8.750 | | | | | | | | | | | | | |
| 8.955 | | | | | | | | | | | | | |
| 8.942 | | | .0182 | | | | | | | | | | |
| 8.973 | | | | | | | | | | | | | |
| 9.025 | | | | | | | | | | | | | |
| 9.110 | | | | | | | | | | | | | |
| 9.222 | | | | | | | | | | | | | |
| 9.275 | | | | | | | | | | | | | |



DATE 23 SEP 74

TABULATED DATA LISTING FOR Q44B (AEDC VAS352)

PAGE 493

AEDC VAS352 Q44B ORBITAL OPS. FUSELAGE Y=0.875

(RTKX01) (25 APR 74)

REFERENCE DATA

STEP = .0239 SQ.FT. XMP = .0000 IN.
 STEP = 22.5803 IN. YMP = .0000 IN.
 STEP = 16.3919 IN. ZMP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
 S.F.LAP = .000 ELEVON = .000
 MAW/MT = 1.000

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HI/40

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y .875 .1240 .0259 .0368 .0331 .0353 .0244 .0884 .0101

MACH (1) = 8.000 ALPHA (2) = -6.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HI/40

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y .875 .1188 .0232 .0364 .0308 .0236 .0025 .0833 .0099

MACH (1) = 8.000 ALPHA (3) = .000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HI/40

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y .875 .0152 .0276 .0248 .0234 .0213 .0137 .0260 .0112

MACH (1) = 8.000 ALPHA (4) = 9.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HI/40

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y .875 .0163 .0261 .0212 .0190 .0181 .0147 .0608 .0081

AEDC VA352 Q4B Q1+TID Q4B, FUSELAGE Y=0.375

(RTK02) (23 APR 74)

REFERENCE DATA

STEP = .0236 93.71. XMRP = .0000 IN.
 STEP = 82.5803 IN. XMRP = .0000 IN.
 STEP = 16.3919 IN. XMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 RN/L = 3.720
 B.F.LAP = .000 ELEVON = .000
 HAWK/T = 1.000

MACH (1) = 0.000 BETA (1) = .000000 T1 = 97.350 Q1 = 3.942 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE H1/A0

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.075 .0229 .0302 .0308 .0281 .0266 .0226 .1065 .0085

MACH (1) = 0.000 BETA (2) = .000 T1 = 97.350 Q1 = 3.942 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE H1/A0

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.075 .0152 .0276 .0248 .0234 .0213 .0137 .0960 .0112

(RTM Y03) (25 APR 74)

AEDC VAS32 Q-49 ORBITER FUSELAGE Y=0.875

REFERENCE DATA

STEP = .0238 IN. XREF = .0000 IN.
 STEP = .0238 IN. YREF = .0000 IN.
 STEP = .0238 IN. ZREF = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 R/V/L = .680
 B.P.LAP = .000 ELEVON = .000
 MAX/MT = 1.000

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HI/40

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

.875 .0942 .0298 .0285 .210 .0124 .0119 .0136 .0151

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HI/40

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

.875 .0499 .0208 .0294 .0218 .0116 .0142 .0120 .0115

MACH (1) = 8.000 ALPHA (3) = .000 TI = 93.425 QI = .682 HREF = .020

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HI/40

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

.875 .0097 .0277 .0265 .0231 .0169 .0147 .0173 .0080

MACH (1) = 8.000 ALPHA (4) = 5.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HI/40

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

.875 .0143 .0176 .0179 .0175 .0124 .0125 .0264 .0047

AEDC VA352 OH-8 01+110 ORB. FUSELAGE Y=0.873

(RTK-104) (25 APR 74)

REFERENCE DATA

STEP = .8238 SQ.FT. XMRP = .0000 IN.
 STEP = 22.2903 IN. XMRP = .0000 IN.
 STEP = 16.3419 IN. XMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 BETA (1) = -2.000 T1 = 93.550 Q1 = .020

SECTION (1) ORB-110 FUSELAGE

DEPENDENT VARIABLE HI/LO

X/L 2000 3000 4000 5000 6000 7000 8000 9000

Y

.873 .0206 .0196 .0193 .0179 .0140 .0108 .0336 .0062

MACH (1) = 8.000 BETA (2) = .000 T1 = 93.550 Q1 = .020

SECTION (1) ORB-110 FUSELAGE

DEPENDENT VARIABLE HI/LO

X/L 2000 3000 4000 5000 6000 7000 8000 9000

Y

.873 .0097 .0277 .0265 .0231 .0169 .0147 .0173 .0060

PARAMETRIC DATA

ALPHA = .000 RN = .680
 B.F.LAP = .000 ELEVON = .000
 HAWAHT = 1.000

(RTN)G3 (25 APR 74)

PARAMETRIC DATA

SECTION (1) DEPENDENT VARIABLE FUSELAGE

REFERENCE DATA

X1 = 8.0000 ALPHA (1) = 10.0000 T1 = 96.087 Z1 = 4.007 HREF = .049
 X2 = 20.0000 Y1 = 10.0000 T2 = 96.087 Z2 = 4.007 HREF = .049
 X3 = 15.0000 Y2 = 10.0000 T3 = 96.087 Z3 = 4.007 HREF = .049
 X4 = 10.0000 Y3 = 10.0000 T4 = 96.087 Z4 = 4.007 HREF = .049

SECTION (2) DEPENDENT VARIABLE FUSELAGE

DEPENDENT VARIABLE FUSELAGE

X1 = 8.0000 ALPHA (2) = 10.0000 T1 = 96.087 Z1 = 4.007 HREF = .049

X2 = 20.0000 Y1 = 10.0000 T2 = 96.087 Z2 = 4.007 HREF = .049

X3 = 15.0000 Y2 = 10.0000 T3 = 96.087 Z3 = 4.007 HREF = .049

SECTION (3) DEPENDENT VARIABLE FUSELAGE

DEPENDENT VARIABLE FUSELAGE

X1 = 8.0000 ALPHA (3) = 10.0000 T1 = 96.087 Z1 = 4.007 HREF = .049

X2 = 20.0000 Y1 = 10.0000 T2 = 96.087 Z2 = 4.007 HREF = .049

X3 = 15.0000 Y2 = 10.0000 T3 = 96.087 Z3 = 4.007 HREF = .049

X4 = 10.0000 Y3 = 10.0000 T4 = 96.087 Z4 = 4.007 HREF = .049

X5 = 5.0000 Y4 = 10.0000 T5 = 96.087 Z5 = 4.007 HREF = .049

X6 = 0.0000 Y5 = 10.0000 T6 = 96.087 Z6 = 4.007 HREF = .049



AEDC VAS32 OM-8 Q1 ORB. FUSELAGE VEC, B74

PRINTED (25 APR 74)

REFERENCE DATA

STEP = .0236 IN. XMP = .0000 IN.
 STEP = .0236 IN. XMP = .0000 IN.
 STEP = .0236 IN. XMP = .0000 IN.
 SCALE = .0236 IN.

XMP = .0236 IN. XMP = .0000 IN.
 XMP = .0236 IN. XMP = .0000 IN.
 XMP = .0236 IN. XMP = .0000 IN.

XMP = .0236 IN. XMP = .0000 IN.
 XMP = .0236 IN. XMP = .0000 IN.
 XMP = .0236 IN. XMP = .0000 IN.

SECTION (1) ORB. FUSELAGE

DEPENDENT VARIABLE MU/AC

XMP = .0236 IN. XMP = .0000 IN. XMP = .0000 IN. XMP = .0000 IN.
 XMP = .0236 IN. XMP = .0000 IN. XMP = .0000 IN. XMP = .0000 IN.
 XMP = .0236 IN. XMP = .0000 IN. XMP = .0000 IN. XMP = .0000 IN.

Y

XMP = .0236 IN. XMP = .0000 IN. XMP = .0000 IN. XMP = .0000 IN.
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XMP = .0236 IN.

XMP = .0236 IN. XMP = .0000 IN. XMP = .0000 IN. XMP = .0000 IN.
 XMP = .0236 IN. XMP = .0000 IN. XMP = .0000 IN. XMP = .0000 IN.
 XMP = .0236 IN. XMP = .0000 IN. XMP = .0000 IN. XMP = .0000 IN.

SECTION (2) ORB. FUSELAGE

DEPENDENT VARIABLE MU/AC

XMP = .0236 IN. XMP = .0000 IN. XMP = .0000 IN. XMP = .0000 IN.
 XMP = .0236 IN. XMP = .0000 IN. XMP = .0000 IN. XMP = .0000 IN.
 XMP = .0236 IN. XMP = .0000 IN. XMP = .0000 IN. XMP = .0000 IN.

Y

XMP = .0236 IN. XMP = .0000 IN. XMP = .0000 IN. XMP = .0000 IN.
 XMP = .0236 IN. XMP = .0000 IN. XMP = .0000 IN. XMP = .0000 IN.
 XMP = .0236 IN. XMP = .0000 IN. XMP = .0000 IN. XMP = .0000 IN.

PARAMETRIC DATA

BETA = .0000 IN. XMP = .0000 IN.
 BETA = .0000 IN. XMP = .0000 IN.
 BETA = .0000 IN. XMP = .0000 IN.

XMP = .0236 IN. XMP = .0000 IN.
 XMP = .0236 IN. XMP = .0000 IN.
 XMP = .0236 IN. XMP = .0000 IN.

XMP = .0236 IN. XMP = .0000 IN.
 XMP = .0236 IN. XMP = .0000 IN.
 XMP = .0236 IN. XMP = .0000 IN.



DATE 23 SEP 74

TABULATED DATA LISTING FOR OHB (AEDC VA352)

PAGE 483

AEDC VA352 OHB O1 ORB. FUSELAGE Y=0.875 (RTK Y13) (25 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XWEP = .0000 IN.
 LREF = 22.5803 IN. YWEP = .0000 IN.
 BREF = 16.3919 IN. ZWEP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.000
 B.FLAP = .000 ELEVON = .000
 HAM/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.875 .0983 .0756 .0616 .0460 .0474 .0474 .0344 .0297

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.875 .1046 .0895 .0750 .0607 .0546 .0435 .0381

MACH (1) = 8.000 ALPHA (3) = 40.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.875 .1198 .0953 .0677 .0787 .0644 .0500 .0468

DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VAS32)

PAGE 484

AEDC VAS32 OMB OF ORC. FUSELAGE Y=0.670

(RTK14, (25 APR 74)

REFERENCE DATA

SQFT = .8238 SQ.FT. KNSP = .0000 IN.
 LREF = 22.5003 IN. WHP = .0000 IN.
 BREF = 16.3319 IN. ZHP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RM/L = 2.000
 B.FLAP = .000 ELEVON = .000
 HAN/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.550 QI = 1.994 HREF = .033

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/HQ

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.875 .0893 .0743 .0631 .0545 .0451 .0319 .0184 .0085

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.550 QI = 1.994 HREF = .033

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/HQ

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.875 .1049 .0886 .0759 .0656 .0543 .0372 .0126 .0008



DATE 23 SEP 74

TABULATED DATA LISTING FOR OHB (AEDC VA332)

PAGE 485

AEDC VA332 OHB Q1 ORB. FUSELAGE Y=0.875

(RTK Y15) (25 APR 74)

REFERENCE DATA

SEP = .8238 SQ.FT. XMRP = .0000 IN.
 SEP = 22.5803 IN. YMRP = .0000 IN.
 BEP = 18.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
 B.FLAP = .000 ELEVON = .000
 HAWAHT = 1.000

MACH (1) = 8.000 ALPHA (1) = 25.000 T1 = 97.887 Q1 = 3.955 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.875 .0745 .0809 .0911 .0485 .0386 .0483 .0830 .0914

MACH (1) = 8.000 ALPHA (2) = 30.000 T1 = 97.887 Q1 = 3.955 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.875 .0908 .0749 .0648 .0603 .0597 .1138 .1797 .1716

MACH (1) = 8.000 ALPHA (3) = 35.000 T1 = 97.887 Q1 = 3.955 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.875 .1072 .0822 .0776 .0828 .1227 .2235 .2439 .2027

DATE 25 SEP 74

TABULATED DATA LISTING FOR OH-8 (AEDC VA352)

PAGE 486

AEDC VA352 OH-8 01 ORB. FUSELAGE Y=0.873

(RTK16) (25 APR 74)

REFERENCE DATA

REF = .0236 33.77. XMRP = .0000 IN.
 REF = 22.5363 IN. YMRP = .0000 IN.
 REF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 27.000 ZI = 3.998 WREF = .049

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
 S.FLAP = .000 ELEVON = .000
 HAWAHT = 1.000

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE

X/L .2000 .3070 .4000 .5000 .6000 .7000 .8000 .9000

Y .873 .0910 .0747 .0640 .0591 .0510 .0417 .0368



DATE 23 SEP 74

TABULATED DATA LISTING FOR OM-B (AEDC VAS32)

PAGE 487

AEDC VAS32 OM-B Q1 OM-B, FUSELAGE Y40.873

(RTK117) (25 APR 74)

REFERENCE DATA

XREF = .8238 SQ.FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. YMRP = .0000 IN.
 BREF = 16.3319 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
 S.FLAP = 10.000 ELEVON = 5.000
 HAN/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 T1 = 97.700 Q1 = 3.949 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y
 .875 .0912 .0752 .0651 .0602 .0602 .1155 .1791 .1728

MACH (1) = 8.000 ALPHA (2) = 35.000 T1 = 97.700 Q1 = 3.949 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y
 .875 .1065 .0917 .0772 .0616 .1238 .2221 .2437 .2001



DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-8 (AEDC VA352)

PAGE 468

AEDC VA352 OH-8 Q1 OH-8 FUSELAGE Y=0.075

(RTN120) (25 APR 74)

REFERENCE DATA

STEP = .0238 SQ.FT. XMRP = .0000 IN.
 LREF = 22.3903 IN. YMRP = .0000 IN.
 BREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 0.000 ALPHA (1) = 30.000 T1 = 54.900 Q1 = 1.980 HREF = .035

SECTION (1) 1/4 INCH FUSELAGE

DEPENDENT VARIABLE H0/H0

X/Z .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.075 .0901 .0763 .0824 .0845 .0457 .0518 .0504 .0623

MACH (1) = 0.000 ALPHA (2) = 35.000 T1 = 54.900 Q1 = 1.980 HREF = .035

SECTION (1) 1/4 INCH FUSELAGE

DEPENDENT VARIABLE H0/H0

X/Z .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.075 .1073 .0981 .0742 .0358 .0555 .0678 .0729 .0885

PARAMETRIC DATA

BETA = .000 RV/L = 2.000
 B.FLAP = 10.000 ELEVON = 5.000
 MAX/HT = 1.000



DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-6B (AEDC VA352)

PAGE 489

AEDC VA352 OH-6B Q1 ORB. FUSELAGE Y=0.875

(RTK Y22) (23 APR 74)

REFERENCE DATA

REF = .9238 SQ.FT. XREF = .0000 IN.
 REF = 22.5803 IN. XREF = .0000 IN.
 REF = 10.5919 IN. XREF = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 30.000 T1 = 93.400 Q1 = .018

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HUMAN

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.875 .0905 .0747 .0640 .0585 .0490 .0371 .0317

MACH (1) = 8.000 ALPHA (2) = 35.000 T1 = 93.400 Q1 = .018

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HUMAN

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.875 .1048 .0894 .0755 .0637 .0569 .0454 .0381

PARAMETRIC DATA

BETA = .000 RN/L = .500
 B.FLAP = 10.000 ELEVON = 9.000
 HAWAHT = 1.000

DATE 23 SEP 74

TABULATED DATA LISTING FOR Q48 (AEDC WA392)

PAGE 470

AEDC WA392 Q48 Q1 ORB. FUSELAGE YR0.873

(RTK123) (23 APR 74)

REFERENCE DATA

STEP = .9238 SQ.FT. 2WIP = .0000 IN.
 STEP = 22.5803 IN. 2WIP = .0000 IN.
 STEP = 16.3919 IN. 2WIP = .0000 IN.
 SCALE = .0179 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
 B.FLAP = 10.000 ELEVON = 10.000
 HAWK/MT = 1.000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.433 QI = .521 MREF = .018

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/AC

X/L .2500 .3000 .4000 .5000 .6000 .7000 .8000 .9000
 Y .873 .0736 .0806 .0808 .0478 .0392 .0391 .0298 .0233

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.433 QI = .521 MREF = .018

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/AC

X/L .2500 .3000 .4000 .5000 .6000 .7000 .8000 .9000
 Y .873 .0925 .0734 .0645 .0578 .0488 .0481 .0372 .0300

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.433 QI = .521 MREF = .018

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/AC

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000
 Y .873 .1080 .0903 .0777 .0706 .0578 .0496 .0439 .0377



DATE 23 SEP 74 TABULATED DATA LISTING FOR OMB (AEDC VAS32)

(RTN 125) (25 APR 74)

AEDC VAS32 OMB Q1 OMB FUSELAGE Y=0.875

PARAMETRIC DATA

BETA = .000 IN/L = 2.000
B.FLAP = 10.000 ELEVON = 10.000
HAWK/HT = 1.000

REFERENCE DATA

REF = 4236 SQ.FT. WING = .0000 IN
REF = 22.5803 IN WING = .0000 IN
REF = 10.2519 IN WING = .0000 IN
SCALE = .0175 SCALE

HACH (1) = 0.000 ALPHA (1) = 30.000 T1 = 94.650 Q1 = 1.985 HREF = .035

SECTION (1) OMB FUSELAGE DEPENDENT VARIABLE MU/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

.675 .0502 .0780 .0827 .0847 .0445 .0805 .0821 .0855

HACH (1) = 0.000 ALPHA (2) = 35.000 T1 = 94.650 Q1 = 1.985 HREF = .035

SECTION (1) OMB FUSELAGE DEPENDENT VARIABLE MU/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

.675 .1074 .0885 .0738 .0664 .0518 .0872 .0720 .0865

DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-8 (AEDC VAS32)

PAGE 472

AEDC VAS32 OH-8 01 ORB. FUSELAGE (20.875

(RTRV2) (25 APR 74)

REFERENCE DATA

SEP = .6236 30. FT. HWP = .0000 IN.
 SEP = 22.5603 IN. HWP = .0000 IN.
 SEP = 16.3915 IN. HWP = .0000 IN.
 SCALE = 10195 SCALE

PARAMETRIC DATA

BETA = .000 TR/L = 3.720
 9. FLAP = 10.000 ELEVON = 10.000
 HAW/HT = 1.000

MACH (1) = 6.000 ALPHA (1) = 25.000 TI = 97.367 Q1 = 3.936 HREF = .049

SECTION 1: ORBITER FUSELAGE DEPENDENT VARIABLE MU/AD

TI = 97.367 Q1 = 3.936 HREF = .049

MACH (1) = 6.000 ALPHA (1) = 25.000 TI = 97.367 Q1 = 3.936 HREF = .049

SECTION 1: ORBITER FUSELAGE DEPENDENT VARIABLE MU/AD

TI = 97.367 Q1 = 3.936 HREF = .049

MACH (1) = 6.000 ALPHA (1) = 25.000 TI = 97.367 Q1 = 3.936 HREF = .049

MACH (1) = 6.000 ALPHA (1) = 25.000 TI = 97.367 Q1 = 3.936 HREF = .049

SECTION 1: ORBITER FUSELAGE DEPENDENT VARIABLE MU/AD

TI = 97.367 Q1 = 3.936 HREF = .049

MACH (1) = 6.000 ALPHA (1) = 25.000 TI = 97.367 Q1 = 3.936 HREF = .049

MACH (1) = 6.000 ALPHA (1) = 25.000 TI = 97.367 Q1 = 3.936 HREF = .049



DATE 23 SEP 74

TABULATED DATA LISTING FOR OM4B (AEDC VA332)

(RTK128) (23 APR 74)

AEDC VA332 OM4B 02 ORB. FUSELAGE Y=0.873

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.F.LAP = .000 ELEVON = .000
HAW/HT = 1.000

REFERENCE DATA

WEP = .8236 SQ.FT. XMP = .0000 IN.
LCP = 22.5803 IN. XMP = .0000 IN.
SEP = 16.3919 IN. ZMP = .0000 IN.
SCALE = .0173 SCALE

MACH (1) = 6.000 ALPHA (1) = 25.000 T1 = 97.087 Q1 = 3.940 HREF = .049

DEPENDENT VARIABLE MU4D

SECTION (1) ORB. FUSELAGE

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y .873 .0732 .0824 .0814 .0469 .0382 .0474 .0816 .0949

MACH (1) = 6.000 ALPHA (2) = 30.000 T1 = 97.087 Q1 = 3.940 HREF = .049

DEPENDENT VARIABLE MU4D

SECTION (1) ORB. FUSELAGE

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y .873 .0808 .0776 .0858 .0889 .0893 .1098 .1710 .1747

MACH (1) = 6.000 ALPHA (3) = 35.000 T1 = 97.087 Q1 = 3.940 HREF = .049

DEPENDENT VARIABLE MU4D

SECTION (1) ORB. FUSELAGE

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y .873 .1047 .0877 .0770 .0638 .1123 .2087 .2412 .2028

AEDC VAS32 Q448 Q2 Q08, FUELSAGE Y=0.873

(RTK950) (23 APR 74)

REFERENCE DATA

REF = .0236 SQ.FT. XMP = .0000 IN.
 REF = 22.5803 IN. XMP = .0000 IN.
 REF = 18.3619 IN. XMP = .0000 IN.
 SCALE = .0175 SCALE

WASH (1) = 0.000 ALPHA (1) = 25.000 TI = 94.933 Q1 = 1.986 HREF = .033

SECTION (1) C081WER FUELSAGE

DEPENDENT VARIABLE H0440

Y/L = 2500 .3000 .4000 .5000 .6000 .7000 .8000 .9000

.873 .743 .613 .484 .352 .222 .092 .0263

WASH (1) = 0.000 ALPHA (2) = 30.000 TI = 94.933 Q1 = 1.986 HREF = .033

SECTION (1) C081WER FUELSAGE

DEPENDENT VARIABLE H0440

Y/L = 2500 .3000 .4000 .5000 .6000 .7000 .8000 .9000

.873 .681 .474 .267 .053 .0434 .0311 .0443 .0847

WASH (1) = 0.000 ALPHA (3) = 35.000 TI = 94.933 Q1 = 1.986 HREF = .033

SECTION (1) C081WER FUELSAGE

DEPENDENT VARIABLE H0440

Y/L = 2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

.873 .1035 .0872 .0750 .0668 .0536 .0680 .0786 .0972

PARAMETRIC DATA

BETA = .000 RM/L = 2.000
 B.FLAP = .000 ELEVON = .000
 MAW/MT = 1.000



AEDC VAS32 OMB 02 ORB. FUSELAGE YNO.873

(RTN131) (25 APR 74)

REFERENCE DATA

SREF = .0236 SQ.FT. WHP = .0000 IN.
 LREF = 22.5003 IN. WHP = .0000 IN.
 SREF = 10.3319 IN. WHP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RVAL = .500
 B.P.LAP = .000 ELEVON = .000
 HAWKNT = 1.000

MACH (1) = 0.000 ALPHA (1) = 25.000 TI = 92.933 QI = .523 HREF = .010

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/NO

Y/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y .873 .0741 .0819 .0812 .0470 .0314 .0390 .0294 .0233

MACH (1) = 0.000 ALPHA (2) = 30.000 TI = 92.933 QI = .523 HREF = .010

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/NO

Y/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y .873 .0899 .0757 .0833 .0890 .0477 .0460 .0387 .0322

MACH (1) = 0.000 ALPHA (3) = 35.000 TI = 92.933 QI = .523 HREF = .010

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/NO

Y/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y .873 .1087 .0900 .0740 .0807 .0891 .0883 .0498 .0398

(RTK V32) (23 APR 74)

AEDC VA352 OH-6 OF ORB. FUSELAGE YFO.875

REFERENCE DATA

PARAMETRIC DATA

REF = .0236 SQ.FT. XMRP = .0000 IN.
 REF = 22.5803 IN. XMRP = .0000 IN.
 REF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 6.000 ALPHA (1) = 35.000 TI = 93.400 QI = 1.000 HREF = .024

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y .875 .0875 .0722 .0596 .0464 .0472 .0337 .0292

MACH (1) = 6.000 ALPHA (2) = 35.000 TI = 93.400 QI = 1.000 HREF = .024

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y .875 .1072 .0900 .0733 .0668 .0556 .0428 .0387

MACH (1) = 6.000 ALPHA (3) = 45.000 TI = 93.400 QI = 1.000 HREF = .024

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y .875 .1322 .1137 .0973 .0899 .0721 .0551 .0531

DATE 23 SEP 74

TABULATED DATA LISTING FOR OH4B (AEDC VA332)

PAGE 477

(RTK Y33) (29 APR 74)

AEDC VA332 OH4B Q2 ORB. FUSELAGE Y40.875

REFERENCE DATA

STEP = .0238 SQ.FT. XMRP = .0000 IN.
 STEP = 22.5803 IN. YMRP = .0000 IN.
 STEP = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.250
 B.FLAP = .000 ELEVON = .000
 HAWAHT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.250 QI = 1.293 HREF = .027

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.075 .0666 .0731 .0617 .0553 .0440 .0463 .0340 .0308

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.250 QI = 1.293 HREF = .027

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.075 .1039 .0664 .0724 .0656 .0631 .0662 .0433 .0399

JRTKVS4. (23 APR 74)

AEDC VA352 OH-6B OE ORB. FUSELAGE Y=0.875

REFERENCE DATA

REF = .8238 SQ.FT. WHP = .0000 IN.
 REF = 22.5803 IN. WHP = .0000 IN.
 REF = 16.3919 IN. ZHP = .0000 IN.
 SCALE = .5175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.500
 S.F.U.P. = .000 ELEVON = .000
 MAX/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.900 QI = 1.534 HREF = .030

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE H/M/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.875 .0894 .0743 .0615 .0546 .0441 .0466 .0351 .0346

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.900 QI = 1.534 HREF = .030

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE H/M/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.875 .1093 .0877 .0730 .0647 .0527 .0580 .0469 .0511



AEDC VA332 OH4B 02 CRB. FUSELAGE YEO.875 (RTK153) (25 APR 74)

REFERENCE DATA

YREF = .0236 SQ.FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. YMRP = .0000 IN.
 BREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 0.000 ALPHA (1) = 30.000 T1 = 98.200 Q1 = 1.797 HREF = .033

SECTION (1) CRB111ER FUSELAGE DEPENDENT VARIABLE MU/HD

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.875 .0865 .0746 .0607 .0543 .0453 .0474 .0400 .0441

MACH (1) = 0.000 ALPHA (2) = 35.000 T1 = 98.200 Q1 = 1.797 HREF = .033

SECTION (1) CRB111ER FUSELAGE DEPENDENT VARIABLE MU/HD

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.875 .1030 .0875 .0732 .0648 .0530 .0618 .0590 .0700

PARAMETRIC DATA

BETA = .000 RV/L = 1.750
 B.FLAP = .000 ELEVON = .000
 HAW/HT = 1.000

DATE 23 SEP 74

TABULATED DATA LISTING FOR OHB (AEDC VAS52)

PAGE 480

(RTN130) (23 APR 74)

REFERENCE DATA

STEP = 1239 30.171 XREF = 10000 IN.
 STEP = 22.5603 IN. XREF = 10000 IN.
 STEP = 10.3919 IN. XREF = 10000 IN.
 S I = 10.75 SCALE

MACH (1) = 8.000 ALPHA (1) = 35.000 Q1 = 94.987 QI = 1.984 MREF = .035

SECTION (1) OHB FUSELAGE

DEPENDENT VARIABLE HU/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000
 Y .875 .1072 .0673 .0740 .0859 .0857 .0737 .0942

MACH (1) = 8.000 ALPHA (2) = 35.000 Q1 = 94.987 QI = 1.984 MREF = .035

SECTION (1) OHB FUSELAGE

DEPENDENT VARIABLE HU/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000
 Y .875 .1072 .0673 .0740 .0859 .0857 .0737 .0942

MACH (1) = 8.000 ALPHA (3) = 45.000 Q1 = 94.987 QI = 1.984 MREF = .035

SECTION (1) OHB FUSELAGE

DEPENDENT VARIABLE HU/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000
 Y .875 .1319 .1139 .0962 .0878 .0711 .0736 .0984

PARAMETRIC DATA

DATA = 1.000 IN/L = 2.000
 BUFLAP = 1.000 ELEVON = 1.000
 HAWAHT = 1.000

DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA352)

PAGE 481

AEDC VA352 OMB 02 ORB, FUSELAGE Y=0.875

(RTK)ST (25 APR 74)

REFERENCE DATA

REF = .8236 80.FT. XREF = .0000 IN.
 LREF = 22.5803 IN. YREF = .0000 IN.
 BREF = 16.3919 IN. ZREF = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RM/L = 2.250
 B.FLAP = .000 ELEVON = .000
 HAW/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.200 QI = 2.341 HREF = .038

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.875 .0866 .0756 .0624 .0554 .0456 .0343 .0223 .0045

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.200 QI = 2.341 HREF = .038

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.875 .1064 .0883 .0730 .0661 .0579 .0428 .0146 .1367

(RTK V38) (25 APR 74)

AEDC VA352 OMB OE ORB. FUSELAGE Y=0.875

REFERENCE DATA

REF = .0236 SQ.FT. XREF = .0000 IN.
 LREF = 22.5803 IN. YREF = .0000 IN.
 BREF = 16.3919 IN. ZREF = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 0.000 ALPHA (1) = 30.000 YI = 98.550 QI = 2.536 HREF = .039

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/AO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.875 .0888 .0765 .0634 .0567 .0484 .0397 .0731 .0962

MACH (1) = 0.000 ALPHA (2) = 30.000 YI = 98.550 QI = 2.536 HREF = .039

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/AO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.875 .1038 .0874 .0752 .0667 .0603 .0567 .1348 .1338

PARAMETRIC DATA

BETA = .000 RN/L = 2.500
 B.FLAP = .000 ELEVON = .000
 HAWAHT = 1.000

AEDC VA332 OM-5 OF 5 FUSELAGE FWD.873

(RTK139) (23 APR 74)

REFERENCE DATA

$\Delta ZP = .0236$ B.P.T. $\Delta MRP = .0000$ IN.
 $\Delta ZP = .023603$ IN. $\Delta MRP = .0000$ IN.
 $\Delta ZP = .023619$ IN. $\Delta MRP = .0000$ IN.
 $\Delta ZP = .0175$ SCALE

PARAMETRIC DATA

$\Delta ZP = .000$ RN/L = 2.750
 $\Delta ZP = .000$ ELEVON = .000
 $\Delta ZP = .000$ HEIGHT = 1.000

$\Delta ZP (1) = 0.000$ ALPHA (1) = 30.000 $\Delta ZP (2) = 98.100$ $\Delta ZP (3) = 2.816$ $\Delta ZP (4) = .041$

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HD

$\Delta ZP (1) = 0.000$ ALPHA (1) = 30.000 $\Delta ZP (2) = 98.100$ $\Delta ZP (3) = 2.816$ $\Delta ZP (4) = .041$

$\Delta ZP (1) = 0.000$ ALPHA (1) = 30.000 $\Delta ZP (2) = 98.100$ $\Delta ZP (3) = 2.816$ $\Delta ZP (4) = .041$

Y

$\Delta ZP (1) = 0.000$ ALPHA (1) = 30.000 $\Delta ZP (2) = 98.100$ $\Delta ZP (3) = 2.816$ $\Delta ZP (4) = .041$

$\Delta ZP (1) = 0.000$ ALPHA (1) = 30.000 $\Delta ZP (2) = 98.100$ $\Delta ZP (3) = 2.816$ $\Delta ZP (4) = .041$

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HD

$\Delta ZP (1) = 0.000$ ALPHA (1) = 30.000 $\Delta ZP (2) = 98.100$ $\Delta ZP (3) = 2.816$ $\Delta ZP (4) = .041$

$\Delta ZP (1) = 0.000$ ALPHA (1) = 30.000 $\Delta ZP (2) = 98.100$ $\Delta ZP (3) = 2.816$ $\Delta ZP (4) = .041$

Y

$\Delta ZP (1) = 0.000$ ALPHA (1) = 30.000 $\Delta ZP (2) = 98.100$ $\Delta ZP (3) = 2.816$ $\Delta ZP (4) = .041$

AEDC VAS32 OM-8 OR ORB. FUSELAGE Y=0.878

(RTNWD) (25 APR 74)

REFERENCE DATA

STEP = .0238 SQ.FT. XMRP = .0000 IN.
 STEP = 22.5803 IN. YMRP = .0000 IN.
 STEP = 18.3319 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 0.000 ALPHA (1) = 30.000 TI = 98.800 QI = 3.118 HREF = .044

SECTION (1) ORB. FUSELAGE

DEPENDENT VARIABLE MU/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.875 .0883 .0775 .0647 .0580 .0503 .0720 .1030 .1333

MACH (1) = 0.000 ALPHA (2) = 35.000 TI = 98.800 QI = 3.118 HREF = .044

SECTION (1) ORB. FUSELAGE

DEPENDENT VARIABLE MU/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.875 .1064 .0881 .0753 .0741 .0782 .1420 .1971 .1883

PARAMETRIC DATA

BETA = .000 TR/L = 3.000
 B.FLAP = .000 ELEVON = .000
 HAWAHT = 1.000



DATE 23 SEP 74

TABULATED DATA LISTING FOR Q448 (AEDC VAS32)

PAGE 489

AEDC VAS32 Q448 Q2 ORB. FUSELAGE Y=0.875

(RTKM1) (29 APR 74)

REFERENCE DATA

SNP = .8238 34.P.T. XMP = .0000 IN.
REF = 22.5803 IN. YMP = .0000 IN.
REF = 18.3919 IN. ZMP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.350
B.FLAP = .000 ELEVON = .000
HAW/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.800 QI = 3.536 MREF = .048

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y .075 .0863 .0769 .0837 .0890 .0826 .0680 .1296 .1532

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.800 QI = 3.536 MREF = .048

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y .075 .1039 .0682 .0796 .0766 .0908 .1710 .2248 .1983

DATE 23 SEP 74

TABULATED DATA LISTING FOR OM-18 (AEDC VAS92)

PAGE 408

(RTN 142) (23 APR 74)

AEDC VAS92 OM-18 OE ORB. FUSELAGE Y=0.873

REFERENCE DATA

STEP = .8238 32. FT. 240P = .0000 IN.
 STEP = 22.3903 IN. 240P = .0000 IN.
 STEP = 16.3919 IN. 240P = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 30.000 Y1 = 97.080 Q1 = 3.937 HREF = .049

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/MD

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.073 .0870 .0764 .0877 .0890 .0889 .1032 .1879 .1733

MACH (1) = 8.000 ALPHA (2) = 35.000 Y1 = 97.020 Q1 = 3.937 HREF = .049

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/MD

X/L .2000 .3000 .4000 .5000 .6000 .7000 .8000 .9000

Y

.073 .1066 .0662 .0762 .0814 .1093 .2091 .2423 .2013

PARAMETRIC DATA

BETA = .000 RW/L = 3.720
 S.F. CAP = .000 ELEVON = .000
 HAWK/NT = 1.000



TABULATED DATA LISTING FOR OHB (AEDC VAS32)

(RTKCD1) (25 APR 74)

AEDC VAS32 OHB Q1+TID ORB, WING UPPER CREASE

PARAMETRIC DATA

BETA = .000 RM/L = 3.720
B.FLAP = .000 ELEVON = .000
HAWKNT = 1.000

REFERENCE DATA

WEP = .0236 SQ.FT. XMP = .0000 IN.
WEP = 22.903 IN. WMP = .0000 IN.
WEP = 18.3912 IN. ZMP = .0000 IN.
SCALE = .0175 SCALE

MACH (1) = 0.000 ALPHA (1) = -10.000 TI = 97.600 Q1 = 3.935 MREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE H1A0

R/L .4000 .5000 .6000 .7000 .8000

PHI
02.000 .0456 .0000 .0000 .0000 .0000

MACH (1) = 0.000 ALPHA (2) = -6.000 TI = 97.600 Q1 = 3.935 MREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE H1A0

R/L .4000 .5000 .6000 .7000 .8000

PHI
02.000 .0807 .0000 .0000 .0000 .0000

MACH (1) = 0.000 ALPHA (3) = .000 TI = 97.600 Q1 = 3.935 MREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE H1A0

R/L .4000 .5000 .6000 .7000 .8000

PHI
02.000 .0246 .0000 .0000 .0000 .0000

MACH (1) = 0.000 ALPHA (4) = 5.000 TI = 97.600 Q1 = 3.935 MREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE H1A0

R/L .4000 .5000 .6000 .7000 .8000

PHI
02.000 .0114 .0000 .0000 .0000 .0000

DATE 29 SEP 74

TABULATED DATA LISTING FOR OM-8 (AEDC VALUES)

PAGE 488

AEDC VALUES OM-8 ON 110 OMB, WING UPPER CREASE

(RTTCOR) 29 APR 74

REFERENCE DATA

REF = .0236 64.71, RAMP = .0000 IN.
 REF = 22.3603 IN, RAMP = .0000 IN.
 REF = 16.3919 IN, RAMP = .0000 IN.
 SCALE = .0178 SCALE

PARAMETRIC DATA

ALPHA = .0000 IN/L = 3.780
 S.P.LAP = .0000 ELEVON = .0000
 MAX/MIN = 1.000

MACH (1) = 0.000 BETA (1) = -2.000 TI = 97.350 QI = 3.942 WREF = .049

SECTION (1) OMB 110 PUSELAGE DEPENDENT VARIABLE HEAD

R/L = .4000 .5000 .6000 .7000 .8000

PHI

Q2.000 .0310 .0000 .0000 .0000 .0000

MACH (1) = 0.000 BETA (2) = .000 TI = 97.350 QI = 3.942 WREF = .049

SECTION (1) OMB 110 PUSELAGE DEPENDENT VARIABLE HEAD

R/L = .4000 .5000 .6000 .7000 .8000

PHI

Q2.000 .0246 .0000 .0000 .0000 .0000



DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VAS32)

PAGE 489

AEDC VAS32 OMB 01-110 OMB, WING UPPER CREASE

(RTCCS) (23 APR 74)

REFERENCE DATA

REF # .0236 33.71. XMR # .0000 IN.
REF # .023803 IN. XMR # .0000 IN.
REF # .023815 IN. XMR # .0000 IN.
SCALE # .0195 SCALE

PARAMETRIC DATA

BETA # .0000 RN/L # .0000
SPLAP # .0000 ELEVON # .0000
WINGHT # 1.0000

MACH (1) # 6.000 ALPHA (1) # -10.000 TI # 93.423 QI # .002 HREF # .020

SECTION 110001 WING FUSELAGE DEPENDENT VARIABLE H1A0

R/L .4000 .5000 .6000 .7000 .9000

PHI

02.000 .0004 .0000 .0000 .0000 .0000

MACH (1) # 6.000 ALPHA (2) # -8.000 TI # 93.423 QI # .002 HREF # .020

SECTION 110002 WING FUSELAGE DEPENDENT VARIABLE H1A0

R/L .4000 .5000 .6000 .7000 .9000

PHI

02.000 .0194 .0000 .0000 .0000 .0000

MACH (1) # 6.000 ALPHA (3) # .000 TI # 93.423 QI # .002 HREF # .020

SECTION 110003 WING FUSELAGE DEPENDENT VARIABLE H1A0

R/L .4000 .5000 .6000 .7000 .9000

PHI

02.000 .0101 .0000 .0000 .0000 .0000

MACH (1) # 6.000 ALPHA (4) # 5.000 TI # 93.423 QI # .002 HREF # .020

SECTION 110004 WING FUSELAGE DEPENDENT VARIABLE H1A0

R/L .4000 .5000 .6000 .7000 .9000

PHI

02.000 .0004 .0000 .0000 .0000 .0000

DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA392)

PAGE 490

AEDC VA392 OMB 01+10 ORB. WING UPPER CREASE (RTKCM) (25 APR 74)

REFERENCE DATA

STEP = .0238 50.FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. YMRP = .0000 IN.
 STEP = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 BETA (1) = -2.000 T1 = 93.950 Q1 = .681 HREF = .020

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE H1/H0

X/L .4000 .5000 .6000 .7000 .8000

PHI

62.000 .0150 .0000 .0000 .0000 .0000

MACH (1) = 8.000 BETA (2) = .000 T1 = 93.950 Q1 = .681 HREF = .020

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE H1/H0

X/L .4000 .5000 .6000 .7000 .8000

PHI

62.000 .0101 .0000 .0000 .0000 .0000

PARAMETRIC DATA

ALPHA = .000 RN/L = .680
 E.FLAP = .000 ELEVON = .000
 HAWKHT = 1.000



AEDC VAS32 OHB 01+110 ORB. WING UPPER CREASE (RTK05) (25 APR 74)

REFERENCE DATA

STEP = .0238 SQ.FT. XMRP = .0000 IN.
 STEP = 22.9603 IN. XMRP = .0000 IN.
 STEP = 16.9919 IN. XMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 98.087 QI = 4.007 HREF = .049

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE HI/40

X/L .4000 .5000 .6000 .7000 .9000

PHI

62.000 .0000 .0000 .0000 .0000

MACH (1) = 8.000 ALPHA (2) = -8.000 TI = 98.087 QI = 4.007 HREF = .049

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE HI/40

X/L .4000 .5000 .6000 .7000 .9000

PHI

62.000 .0000 .0000 .0000 .0000

MACH (1) = 8.000 ALPHA (3) = .000 TI = 98.087 QI = 4.007 HREF = .049

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE HI/40

X/L .4000 .5000 .6000 .7000 .9000

PHI

62.000 .0000 .0000 .0000 .0000

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
 B.FLAP = .000 ELEVON = .000
 HAW/HT = 1.000

DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-13 (AEDC VAS32)

PAGE 492

AEDC VAS32 OH-13 Q1 ORB. WING UPPER CREASE (RTKCID) (25 APR 74)

REFERENCE DATA

WREF = .6238 SQ.FT. YMRP = .0000 IN.
 LREF = 22.5803 IN. YMRP = .0000 IN.
 BREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = -8.000 TI = 96.800 Q1 = 3.961 HREF = .049

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE HU/HO

X/L .4000 .5000 .6000 .7000 .9000

PHI

62.000 .0312 .0147 .0388 .0252 .0288

MACH (1) = 8.000 ALPHA (2) = .000 TI = 96.800 Q1 = 3.961 HREF = .049

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE HU/HO

X/L .4000 .5000 .6000 .7000 .9000

PHI

62.000 .0212 .0061 .0157 .0064 .0137

PARAMETRIC DATA

BETA = .000 RV/L = 3.720
 S.F.L.A. = .000 ELEVON = .000
 HAN/HIT = 1.000



DATE 23 SEP 74

TABULATED DATA LISTING FOR OH4B (AEDC VAS32)

PAGE 493

AEDC VAS32 OH4B Q1 ORB. WING UPPER CREASE

(RTKC11) (25 APR 74)

REFERENCE DATA

REF = .8238 SQ.FT. XREF = .0000 IN.
 LREF = 22.5803 IN. YREF = .0000 IN.
 BREF = 16.3919 IN. ZREF = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = -8.000 TI = 93.000 Q1 =

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .4000 .5000 .6000 .7000 .9000

PHI

82.000 0132 .0088 .0124 .0164 .0471

MACH (1) = 8.000 ALPHA (2) = .000 TI = 93.000 Q1 =

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .4000 .5000 .6000 .7000 .9000

PHI

82.000 .0101 .0048 .0071 .0045 .0208

PARAMETRIC DATA

BETA = .000 RN/L = .880
 B.FLAP = .000 ELEVON = .000
 HAWAHT = 1.000

.877 HREF = .020

.877 HREF = .020

AEDC VA352 OH-8 Q1 ORB. WING UPPER CREASE (RTKC12) (23 APR 74)

REFERENCE DATA

STEP = .0238 90.FT. XMRP = .0000 IN.
 LIEP = 22.5803 IN. XMRP = .0000 IN.
 DIEP = 18.3919 IN. XMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 29.000 TI = 93.400 Q1 = .524 HREF = .018

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/AD

X/L .4000 .5000 .6000 .7000 .9000

PHI

62.000 .0033 .0009 .0012 .0011 .0009

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.400 Q1 = .524 HREF = .018

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/AD

X/L .4000 .5000 .6000 .7000 .9000

PHI

62.000 .0022 .0008 .0008 .0000 .0009

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.400 Q1 = .524 HREF = .018

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/AD

X/L .4000 .5000 .6000 .7000 .9000

PHI

62.000 .0019 .0008 .0008 .0008 .0011

PARAMETRIC DATA

BETA = .000 RW/L = .500
 B, FLAP = .000 ELEVON = .000
 HAW/HT = 1.000

TABULATED DATA LISTING FOR OMB (AEDC VAS32)

DATE 23 SEP 74

(RTK13) (23 APR 74)

AEDC VAS32 OMB 01 ORB. WING UPPER CREASE

REFERENCE DATA
 STEP = .0238 SQ.FT. XMRP = .0000 IN.
 JREF = 22.9603 IN. YMRP = .0000 IN.
 ZREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE
 MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.100 Q1 = 1.003 HREF = .023
 BETA = .000 RM/L = 1.000
 S.FLAP = .000 ELEVON = .000
 HAWAHT = 1.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .4000 .5000 .6000 .7000 .9000

PHI
 62.000 .0023 .0006 .0010 .0001 .0008

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.100 Q1 = 1.003 HREF = .023

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .4000 .5000 .6000 .7000 .9000

PHI
 62.000 .0018 .0006 .0008 .0011 .0007

MACH (1) = 8.000 ALPHA (3) = 40.000 TI = 94.100 Q1 = 1.003 HREF = .023

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .4000 .5000 .6000 .7000 .9000

PHI
 62.000 .0016 .0004 .0004 .0007 .0016

DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-8 (AEDC VA352)

PAGE 498

AEDC VA352 OH-8 Q1 ORB. WING UPPER CREASE

(RTKC14) (23 APR 74)

REFERENCE DATA

REF = .0236 SQ.FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. XMRP = .0000 IN.
 SREF = 16.3919 IN. XMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
 B.FLAP = .000 ELEVON = .000
 HAW/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.550 Q1 = 1.994 HREF = .035

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/40

X/L .4000 .5000 .6000 .7000 .8000

PHI

62.000 .0021 .0006 .0007 .0012

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.550 Q1 = 1.994 HREF = .035

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/40

X/L .4000 .5000 .6000 .7000 .8000

PHI

62.000 .0017 .0004 .0005 .0004 .0007



DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-6B (AEDC VA352)

PAGE 497

AEDC VA352 OH-6B Q1 ORB. WING UPPER CREASE

(RTKC15) (25 APR 74)

REFERENCE DATA

SEP = .0238 SJ.FT. XMAP = .0000 IN.
 LEP = 22.5803 IN. XMAP = .0000 IN.
 SEP = 16.3919 IN. ZMAP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 0.000 ALPHA (1) = 25.000 T1 = 97.867 Q1 = 3.955 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/ND

X/L .4000 .5000 .6000 .7000 .9000

PHI

62.000 .0034 .0014 .0018 .0009 .0029

MACH (1) = 0.000 ALPHA (2) = 35.000 T1 = 97.867 Q1 = 3.955 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/ND

X/L .4000 .5000 .6000 .7000 .9000

PHI

62.000 .0022 .0008 .0009 .0008 .0023

MACH (1) = 0.000 ALPHA (3) = 35.000 T1 = 97.867 Q1 = 3.955 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/ND

X/L .4000 .5000 .6000 .7000 .9000

PHI

62.000 .0015 .0004 .0006 .0016 .0014

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
 B.FLAP = .000 ELEVON = .000
 HAWAHT = 1.000

DATE 23 SEP 74

TABULATED DATA LISTING FOR OH48 (AEDC V4352)

PAGE 488

AEDC V4352 OH48 Q1 ORG. WING UPPER CREASE

(RTKC17) (23 APR 74)

REFERENCE DATA

REF = .6236 82.17. XWSP = .0000 IN.
 LREF = 22.5803 IN. YWSP = .0000 IN.
 GREP = 16.3919 IN. ZWSP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
 S.P.LAP = 10.000 ELEVON = 9.000
 HAW/MT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 T1 = 97.700 Q1 = 3.949 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU40

X/L .4000 .5000 .6000 .7000 .9000

PHI

62.000 .0022 .0008 .0010 .0003 .0024

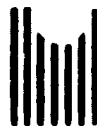
MACH (1) = 8.000 ALPHA (2) = 35.000 T1 = 97.700 Q1 = 3.949 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU40

X/L .4000 .5000 .6000 .7000 .9000

PHI

62.000 .0015 .0004 .0008 .0016 .0017



TABULATED DATA LISTING FOR OM-B (AEDC VA352)

DATE 23 SEP 74

(RTK18) (23 APR 74)

AEDC VA352 OM-B Q1 ORB. WING UPPER CREASE

PARAMETRIC DATA

BETA = -5.000 RN = 3.720
 S.F. LAP = 10.000 ELEVON = 5.000
 HAW/MT = 1.000

REFERENCE DATA

STEP = .8238 SQ.FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. XMRP = .0000 IN.
 BREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.200 Q1 = 3.933 MREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU40

X/L .4000 .5000 .6000 .7000 .8000

PHI
 62.000 .0046 .0016 .0026 .0007 .0047

MACH (1) = 8.000 ALPHA (2) = 39.000 TI = 97.200 Q1 = 3.933 MREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU40

X/L .4000 .5000 .6000 .7000 .8070

PHI
 62.000 .0038 .0216 .0026 .0030 .0060

DATE 23 SEP 74

TABULATED DATA LISTING FOR OM-8 (AEDC VA392)

PAGE 800

AEDC VA392 OM-8 Q1 ORB. WING UPPER CREASE

(RTNC19) (25 APR 74)

REFERENCE DATA

REF Z = .8238 SQ.FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. XMRP = .0000 IN.
 BREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 2.000
 B.FLAP = 10.300 ELEVON = 5.000
 HANG/MT = 1.000

MACH (1) = 6.000 ALPHA (1) = 30.000 TI = 96.850 Q1 = 1.983 HREF = .035

SECTION (1) ORB. WING FUSELAGE DEPENDENT VARIABLE MU/AD

X/L .4000 .5000 .6000 .7000 .9000

PHI

52.000 .0085 .0024 .0026 .0028 .0020

MACH (1) = 6.000 ALPHA (2) = 35.000 TI = 96.850 Q1 = 1.983 HREF = .035

SECTION (1) ORB. WING FUSELAGE DEPENDENT VARIABLE MU/AD

X/L .4000 .5000 .6000 .7000 .9000

PHI

62.000 .0042 .0013 .0019 .0010 .0026



AEDC VAS32 OMB 01 OMB WING UPPER CREASE

(RTKCD) (25 APR 74)

REFERENCE DATA

REF = .0236 IN. FT. WING = .0000 IN.
 REF = 22.9633 IN. WING = .0000 IN.
 REF = 18.3516 IN. WING = .0000 IN.
 SCALE = .0193 SCALE

MACH (1) = 8.000 ALPHA (1) = 30.000 YI = 98.900 QI = 1.980 HREF = .035

SECTION (1) OMB WING FUSELAGE DEPENDENT VARIABLE MU/MD

X/L .4000 .5000 .6000 .7000 .9000

PHI

92.000 .0023 .0006 .0004 .0004 .0006

MACH (1) = 8.000 ALPHA (2) = 35.000 YI = 98.900 QI = 1.980 HREF = .035

SECTION (1) OMB WING FUSELAGE DEPENDENT VARIABLE MU/MD

X/L .4000 .5000 .6000 .7000 .9000

PHI

92.000 .0017 .0004 .0006 .0004 .0006

PARAMETRIC DATA

BETA = .000 RM/L = 2.000
 B.FLAP = 10.000 ELEVON = 9.000
 HAWK/MT = 1.000

TABULATED DATA LISTING FOR OMB (AEDC VAS32)

AEDC VAS32 OMB 01 OMB. WING UPPER CREASE (RTLC21) (25 APR 74)

REFERENCE DATA

REF = .8236 30.17. 144P = .0000 IN.
 REF = 22.5623 IN. 144P = .0000 IN.
 REF = 16.3919 IN. 244P = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RM/L = .500
 B.P.LAP = 10.000 ELEVON = 5.000
 HAWK/NT = 1.000

MACH (1) = 0.000 ALPHA (1) = 30.000 TI = 91.980 Q1 = .516 HREF = .017

SECTION (1) OMB11ER FUSELAGE DEPENDENT VARIABLE MUAD

1/L .4000 .5000 .6000 .7000 .9000

PHI

02.000 .0001 .0010 .0022 .0016 .0011

MACH (1) = 0.000 ALPHA (2) = 35.000 TI = 91.980 Q1 = .516 HREF = .017

SECTION (1) OMB11ER FUSELAGE DEPENDENT VARIABLE MUAD

1/L .4000 .5000 .6000 .7000 .9000

PHI

02.000 .0010 .0010 .0015 .0008 .0016



TABULATED DATA LISTING FOR OM-B (AEDC VAS32)

DATE 23 SEP 74

(NTRC22) (23 APR 74)

AEDC VAS32 OM-B 01 OM-B VING UPPER CREASE

PARAMETRIC DATA
 BETA = .000 IN/L = .900
 S.F.LAP = 10.000 ELEVON = 9.000
 MAX/MIN = 1.000

REFERENCE DATA

VEP = .0236 33.71. VMAP = .0000 IN.
 VEP = 22.9603 IN. VMAP = .0000 IN.
 VEP = 16.3919 IN. VMAP = .0000 IN.
 SCALE = .0195 SCALE

MACH (1) = 0.000 ALPHA (1) = 30.000 T1 = 93.400 Q1 = .923 HREF = .018

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MUAD

Y/L 4000 .5000 .6000 .7000 .9000

PHI 02.000 .0022 .0079 .0012 .0004 .0010

MACH (1) = 0.000 ALPHA (2) = 35.000 T1 = 93.400 Q1 = .923 HREF = .018

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MUAD

Y/L 4000 .5000 .6000 .7000 .9000

PHI 02.000 .0016 .0008 .0008 .0008 .0021

DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-6 (AEDC VAS32)

PAGE 814

AEDC VAS32 OH-6 Q1 ORB. WING UPPER CREASE

(RTKCS) (25 APR 74)

REFERENCE DATA

BREF = .8238 80.FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. YMRP = .0000 IN.
 BREF = 18.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 29.000 TI = 93.433 Q1 =

.521 HREF = .018

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/NO

X/L .4000 .5000 .6000 .7000 .8000

PHI

62.000 .0032 .0011 .0017 .0008 .0008

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.433 Q1 =

.521 HREF = .018

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/NO

X/L .4000 .5000 .6000 .7000 .8000

PHI

62.000 .0025 .0008 .0007 .0008 .0011

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.433 Q1 =

.521 HREF = .018

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/NO

X/L .4000 .5000 .6000 .7000 .8000

PHI

62.000 .0020 .0008 .0008 .0008 .0010

PARAMETRIC DATA

BETA = .000 TM/L = .900
 G.FLAP = 10.000 ELEVON = 10.000
 HAWAHT = 1.000

DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA392)

PAGE 308

AEDC VA392 OMB C1 OMB WING UPPER CREASE

(RTAC24) (23 APR 74)

REFERENCE DATA

REF = .0236 83.17, XMRP = .0000 IN.
REF = 22.5903 IN, XMRP = .0000 IN.
REF = 19.3919 IN, XMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -1.000 RN/L = .300
B.F.U.P = 10.000 ELEVON = 10.000
HAWAHT = 1.000

MACH (1) = 0.000 ALPHA (1) = 25.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/HO

X/L .4000 .5000 .6000 .7000 .9000

PHI

02.000 .0095 .0028 .0035 .0020 .0024

MACH (1) = 0.000 ALPHA (2) = 30.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/HO

X/L .4000 .5000 .6000 .7000 .9000

PHI

02.000 .0037 .0016 .0021 .0013 .0011

MACH (1) = 0.000 ALPHA (3) = 35.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/HO

X/L .4000 .5000 .6000 .7000 .9000

PHI

02.000 .0040 .0012 .0014 .0009 .0025

AEDC VA352 OH-6B Q1 ORB. WING UPPER CREASE (RTKC25) (25 APR 74)

REFERENCE DATA

STEP = .8238 SQ.FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. YMRP = .0000 IN.
 STEP = 18.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.850 QI = 1.985 HREF = .035

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE HUA/D

X/L .4000 .5000 .6000 .7000 .9000

PHI

82.000 .0021 .0006 .0008 .0005 .0013

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.850 QI = 1.985 HREF = .035

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE HUA/D

X/L .4000 .5000 .6000 .7000 .9000

PHI

82.000 .0017 .0004 .0006 .0007 .0012

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
 S.F.LAP = 10.000 ELEVON = 10.000
 HAWAHT = 1.000



DATE 23 SEP 74

TABULATED DATA LISTING FOR ORWB (AEDC VA352)

PAGE 507

AEDC VA352 ORWB Q1 ORWB WING UPPER CREASE

(RTKC26) (25 APR 74)

REFERENCE DATA

REF = .8236 SQ.FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. XMRP = .0000 IN.
 BREF = 16.3319 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -6.000 RM/L = 2.000
 B.F.LAP = 10.000 ELEVON = 10.000
 HAN/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 96.450 Q1 = 1.983 HREF = .035

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .4000 .5000 .6000 .7000 .9000

PHI

62.000 .0065 .0021 .0027 .0016 .0016

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 96.450 Q1 = 1.983 HREF = .035

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .4000 .5000 .6000 .7000 .9000

PHI

62.000 .0040 .0013 .0020 .0012 .0029

DATE 23 SEP 74

TABULATED DATA LISTING FOR OM48 (AEDC VA332)

PAGE 806

AEDC VA332 OM48 01 ORB. WING UPPER CREASE

(RTK27) (23 APR 74)

REFERENCE DATA

WREF = .8236 SQ.FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. YMRP = .0000 IN.
 BREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 25.000 T1 = 97.367 Q1 = 3.936 WREF = .049

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE HU/HO

X/L .4000 .5000 .6000 .7000 .9000

PHI

82.000 .0034 .0016 .0018 .0011 .0032

MACH (1) = 8.000 ALPHA (2) = 30.000 T1 = 97.367 Q1 = 3.936 WREF = .049

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE HU/HO

X/L .4000 .5000 .6000 .7000 .9000

PHI

82.000 .0023 .0006 .0009 .0011 .0022

MACH (1) = 8.000 ALPHA (3) = 35.000 T1 = 97.367 Q1 = 3.936 WREF = .049

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE HU/HO

X/L .4000 .5000 .6000 .7000 .9000

PHI

82.000 .0016 .0004 .0007 .0011 .0022

PARAMETRIC DATA

DELTA = .000 RV/L = 3.780
 B.FLAP = 10.000 ELEVON = 10.000
 HAWAHT = 1.000

DATE 23 SEP 74 TABULATED DATA LISTING FOR OMB (AEDC VA332)

AEDC VA332 OMB 01 OMB. WING UPPER CREASE (RTAC28) (23 APR 74)

REFERENCE DATA
 BREF = .8238 80. FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. XMRP = .0000 IN.
 BREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 25.000 T1 = 97.300 Q1 = 3.930 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L .4000 .5000 .6000 .7000 .9000

PHI
 82.000 .0144 .0047 .0085 .0061 .0035

MACH (1) = 8.000 ALPHA (2) = 30.000 T1 = 97.300 Q1 = 3.930 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L .4000 .5000 .6000 .7000 .9000

PHI
 82.000 .0084 .0028 .0043 .0027 .0018

MACH (1) = 8.000 ALPHA (3) = 35.000 T1 = 97.300 Q1 = 3.930 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L .4000 .5000 .6000 .7000 .9000

PHI
 82.000 .0035 .0015 .0027 .0019 .0004

PARAMETRIC DATA

BETA = -6.000 RN/L = 3.720
 S.F.LAP = 10.000 ELEVON = 10.000
 MAX/MIN = 1.000

AEDC VAS32 OMB Q1+T10 ORB. FUSELAGE Z57.325

(RTNFO1) (25 APR 74)

REFERENCE DATA

REF = .8238 SQ.FT. XMRP = .0000 IN.
 LREF = 22.9803 IN. YMRP = .0000 IN.
 ZREF = 18.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
 B.FLAP = .000 ELEVON = .000
 HAWAII = 1.000

MACH (1) = 8.000 ALPHA (1) = -10.000 T1 = 97.600 Q1 = 3.935 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE H1/H0

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.525 .0372 .0396 .0000 .0000 .0000 .0000

MACH (1) = 8.000 ALPHA (2) = -8.000 T1 = 97.600 Q1 = 3.935 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE H1/H0

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.525 .0247 .0296 .0000 .0000 .0000 .0000

MACH (1) = 8.000 ALPHA (3) = .000 T1 = 97.600 Q1 = 3.935 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE H1/H0

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.525 .0241 .0194 .0000 .0000 .0000 .0000

MACH (1) = 8.000 ALPHA (4) = 5.000 T1 = 97.600 Q1 = 3.935 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE H1/H0

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.525 .0163 .0152 .0000 .0000 .0000 .0000



AEDC VA352 OH-6B Q1+T10 ORB, FUSELAGE Z=7.525

(RTHP02) (25 APR 74)

REFERENCE DATA

REF = .8236 SQ.FT. XMRP = .0000 IN.
 LREF = 22.9803 IN. YMRP = .0000 IN.
 BREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 FN/L = 3.780
 B.FLAP = .000 ELEVON = .000
 HAWAHT = 1.000

MACH (1) = 8.000 BETA (1) = -2.000 T1 = 97.350 Q1 = 3.942 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE H1+0

X/L .3000 .4000 .5000 .6000 .7000 .8000
 Z
 7.525 .0301 .0266 .0000 .0000 .0000 .0000

MACH (1) = 8.000 BETA (2) = .000 T1 = 97.350 Q1 = 3.942 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE H1+0

X/L .3000 .4000 .5000 .6000 .7000 .8000
 Z
 7.525 .0241 .0194 .0000 .0000 .0000 .0000

AEDC VA332 OMB 01+110 OMB. FUELAGE 257.525

(RTWFD3) (25 APR 74)

REFERENCE DATA

REF = .6236 93.425 IN. WHP = .0000 IN.
 REF = 22.9803 IN. WHP = .0000 IN.
 REF = 18.3919 IN. WHP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .680
 B.FLAP = .000 ELEVON = .000
 HAW/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = -10.000 T1 = 93.425 Q1 = .020 WREF = .020

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE H1/H0

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.525 .0232 .0420 .1000 .1700 .0000 .0000

MACH (1) = 8.000 ALPHA (2) = -8.000 T1 = 93.425 Q1 = .020 WREF = .020

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE H1/H0

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.525 .0145 .0104 .0000 .0700 .0000 .0000

MACH (1) = 8.000 ALPHA (3) = .000 T1 = 93.425 Q1 = .020 WREF = .020

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE H1/H0

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.525 .0162 .0129 .0000 .0000 .0000 .0000

MACH (1) = 8.000 ALPHA (4) = .000 T1 = 93.425 Q1 = .020 WREF = .020

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE H1/H0

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.525 .0108 .0077 .0000 .0000 .0000 .0000



DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-6B (AEDC VAL382)

PAGE 913

(RTWFO4) (25 APR 74)

AEDC VAL382 OH-6B C1+T10 ORB. FUSELAGE 247.925

REFERENCE DATA

REF = .8238 SQ.FT. 144P = .0000 IN.
 LREF = 22.5603 IN. 144P = .0000 IN.
 BREF = 16.3919 IN. 244P = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 RN/L = .000
 B.FLAP = .000 ELEVON = .000
 HAW/HT = 1.000

MACH (1) = 8.000 BETA (1) = -2.000 T1 = 93.91 Q1 = .001 HREF = .020

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HEAD

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.925 .0183 .0182 .0000 .0000 .0000

MACH (1) = 8.000 BETA (2) = .000 T1 = 93.930 Q1 = .001 HREF = .020

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HEAD

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.925 .0182 .0129 .0000 .0000 .0000

AEDC VAS32 OM-8 OL-TIO ORB. FUSELAGE Z47.925

(RTKF03) (E3 APR 74)

REFERENCE DATA

STEP = .8238 94.11. XMRP = .0000 IN.
 STEP = 22.5803 IN. YMRP = .0000 IN.
 STEP = 18.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

WACH (1) = 8.000 ALPHA (1) = -10.000 TI = 98.087 QI = 4.007 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE H1A0

X/L = .3000 .4000 .5000 .6000 .7000 .8000

Z

7.925 .0000 .0000 .0000 .0000 .0000 .0000

WACH (1) = 8.000 ALPHA (2) = -8.000 TI = 96.087 QI = 4.007 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE H1A0

X/L = .3000 .4000 .5000 .6000 .7000 .8000

Z

7.925 .0000 .0000 .0000 .0000 .0000 .0000

WACH (1) = 8.000 ALPHA (3) = .000 TI = 96.087 QI = 4.007 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE H1A0

X/L = .3000 .4000 .5000 .6000 .7000 .8000

Z

7.925 .0000 .0000 .0000 .0000 .0000 .0000

PARAMETRIC DATA

BETA = .000 RN/L = 3.770
 B.FLAP = .000 ELEVON = .000
 HAWKNT = 1.000

TABLE A-10. DATA LISTING FOR 0448 (AEDC VA392)

(RTKF10) (25 APR 74)

WAGNER PAGE 01 OFF. PAGE 77.325

REPLY REFERENCE DATA

| | | | | | |
|--------------|------------|--------------|----------|-------------|-------|
| WAVELENGTH = | 0.0000 IN | BETA = | .000 | RY/L = | 3.720 |
| WAVELENGTH = | 22.5000 IN | B.F.LAP = | .000 | ELEVATION = | .000 |
| WAVELENGTH = | 16.3516 IN | WAVELENGTH = | .0000 IN | | 1.000 |
| WAVELENGTH = | 0.0175 IN | | | | |

PARAMETRIC DATA

| | | | |
|-----------|-------|----------|-------|
| BE TA = | .000 | GN/L = | 3.720 |
| B.F.A.P = | .000 | ELEVON = | .000 |
| MAWA-T = | 1.000 | | |

DEPENDENT VARIABLE: MUNC

[illegible]

ST. JOHN : 1906 : 105 : 105

| Case No. | Case Name | Case No. | Case Name | Case No. | Case Name |
|----------|-----------|----------|-----------|----------|-----------|
| 1 | 10101 | 2 | 10102 | 3 | 10103 |
| 4 | 10104 | 5 | 10105 | 6 | 10106 |
| 7 | 10107 | 8 | 10108 | 9 | 10109 |
| 10 | 10110 | 11 | 10111 | 12 | 10112 |
| 13 | 10113 | 14 | 10114 | 15 | 10115 |
| 16 | 10116 | 17 | 10117 | 18 | 10118 |
| 19 | 10119 | 20 | 10120 | 21 | 10121 |
| 22 | 10122 | 23 | 10123 | 24 | 10124 |
| 25 | 10125 | 26 | 10126 | 27 | 10127 |
| 28 | 10128 | 29 | 10129 | 30 | 10130 |
| 31 | 10131 | 32 | 10132 | 33 | 10133 |
| 34 | 10134 | 35 | 10135 | 36 | 10136 |
| 37 | 10137 | 38 | 10138 | 39 | 10139 |
| 40 | 10140 | 41 | 10141 | 42 | 10142 |
| 43 | 10143 | 44 | 10144 | 45 | 10145 |
| 46 | 10146 | 47 | 10147 | 48 | 10148 |
| 49 | 10149 | 50 | 10150 | 51 | 10151 |
| 52 | 10152 | 53 | 10153 | 54 | 10154 |
| 55 | 10155 | 56 | 10156 | 57 | 10157 |
| 58 | 10158 | 59 | 10159 | 60 | 10160 |
| 61 | 10161 | 62 | 10162 | 63 | 10163 |
| 64 | 10164 | 65 | 10165 | 66 | 10166 |
| 67 | 10167 | 68 | 10168 | 69 | 10169 |
| 70 | 10170 | 71 | 10171 | 72 | 10172 |
| 73 | 10173 | 74 | 10174 | 75 | 10175 |
| 76 | 10176 | 77 | 10177 | 78 | 10178 |
| 79 | 10179 | 80 | 10180 | 81 | 10181 |
| 82 | 10182 | 83 | 10183 | 84 | 10184 |
| 85 | 10185 | 86 | 10186 | 87 | 10187 |
| 88 | 10188 | 89 | 10189 | 90 | 10190 |
| 91 | 10191 | 92 | 10192 | 93 | 10193 |
| 94 | 10194 | 95 | 10195 | 96 | 10196 |
| 97 | 10197 | 98 | 10198 | 99 | 10199 |
| 100 | 10200 | 101 | 10201 | 102 | 10202 |
| 103 | 10203 | 104 | 10204 | 105 | 10205 |
| 106 | 10206 | 107 | 10207 | 108 | 10208 |
| 109 | 10209 | 110 | 10210 | 111 | 10211 |
| 112 | 10212 | 113 | 10213 | 114 | 10214 |
| 115 | 10215 | 116 | 10216 | 117 | 10217 |
| 118 | 10218 | 119 | 10219 | 120 | 10220 |
| 121 | 10221 | 122 | 10222 | 123 | 10223 |
| 124 | 10224 | 125 | 10225 | 126 | 10226 |
| 127 | 10227 | 128 | 10228 | 129 | 10229 |
| 130 | 10230 | 131 | 10231 | 132 | 10232 |
| 133 | 10233 | 134 | 10234 | 135 | 10235 |
| 136 | 10236 | 137 | 10237 | 138 | 10238 |
| 139 | 10239 | 140 | 10240 | 141 | 10241 |
| 142 | 10242 | 143 | 10243 | 144 | 10244 |
| 145 | 10245 | 146 | 10246 | 147 | 10247 |
| 148 | 10248 | 149 | 10249 | 150 | 10250 |
| 151 | 10251 | 152 | 10252 | 153 | 10253 |
| 154 | 10254 | 155 | 10255 | 156 | 10256 |
| 157 | 10257 | 158 | 10258 | 159 | 10259 |
| 160 | 10260 | 161 | 10261 | 162 | 10262 |
| 163 | 10263 | 164 | 10264 | 165 | 10265 |
| 166 | 10266 | 167 | 10267 | 168 | 10268 |
| 169 | 10269 | 170 | 10270 | 171 | 10271 |
| 172 | 10272 | 173 | 10273 | 174 | 10274 |
| 175 | 10275 | 176 | 10276 | 177 | 10277 |
| 178 | 10278 | 179 | 10279 | 180 | 10280 |
| 181 | 10281 | 182 | 10282 | 183 | 10283 |
| 184 | 10284 | 185 | 10285 | 1 | |

DEPENDENT VARIABLE: MATH

2005 2006 2007 2008 2009

MISSION : IMPERFECT! ER FUGLAGE

| Year | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 |
|------|-------|-------|-------|-------|-------|-------|
| 1955 | 0.014 | 0.016 | 0.017 | 0.018 | 0.019 | 0.020 |
| 1956 | 0.015 | 0.017 | 0.018 | 0.019 | 0.020 | 0.021 |
| 1957 | 0.016 | 0.018 | 0.019 | 0.020 | 0.021 | 0.022 |
| 1958 | 0.017 | 0.019 | 0.020 | 0.021 | 0.022 | 0.023 |
| 1959 | 0.018 | 0.020 | 0.021 | 0.022 | 0.023 | 0.024 |
| 1960 | 0.019 | 0.021 | 0.022 | 0.023 | 0.024 | 0.025 |

DATE 23 SEP 74

TABULATED DATA LISTING FOR QMB (AEDC VAS82)

PAGE 516

AEDC VAS82 QMB 01 QMB FUSELAGE 247.925

(RTW11) (25 APR 74)

REFERENCE DATA

REF = .8238 SQ.FT. XMP = .0000 IN.
 LREF = 22.9803 IN. XMP = .0000 IN.
 SREF = 16.3919 IN. ZMP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .000
 S.F.LAP = .000 ELEVON = .000
 HAWK/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = -8.000 T1 = 93.000 Q1 = .077 HREF = .020

SECTION (1) QMB1 PER FUSELAGE DEPENDENT VARIABLE MU/AD

R/L .3000 .4000 .5000 .6000 .7000 .8000

2
 7.925 .0170 .0136 .0073 .0031 .0032 .0049

MACH (1) = 6.000 ALPHA (2) = .000 T1 = 93.000 Q1 = .077 HREF = .020

SECTION (1) QMB1 PER FUSELAGE DEPENDENT VARIABLE MU/AD

R/L .3000 .4000 .5000 .6000 .7000 .8000

2
 7.925 .0133 .0104 .0056 .0034 .0036 .0033

ORIGINAL PAGE IS
 OF POOR QUALITY



(RTW12) (25 APR 74)

OMB VAS32 015 01 OMB FUELA2 27.925

PARAMETRIC DATA
 DETA = .000 RAL = .900
 DUTAP = .000 ELEVON = .000
 MAXPA = 1.000

REFERENCE DATA
 OMB VAS32 015 01
 OMB FUELA2 27.925

OMB VAS32 015 01 T1 = 95.400 Q1 = .324 HREF = .018

DEPENDENT VARIABLE PUNO

OMB VAS32 015 01 T1 = 95.400 Q1 = .324 HREF = .018

OMB VAS32 015 01 T1 = 95.400 Q1 = .324 HREF = .018

OMB VAS32 015 01 T1 = 95.400 Q1 = .324 HREF = .018

DEPENDENT VARIABLE PUNO

OMB VAS32 015 01 T1 = 95.400 Q1 = .324 HREF = .018

OMB VAS32 015 01 T1 = 95.400 Q1 = .324 HREF = .018

OMB VAS32 015 01 T1 = 95.400 Q1 = .324 HREF = .018

DEPENDENT VARIABLE PUNO

OMB VAS32 015 01 T1 = 95.400 Q1 = .324 HREF = .018

OMB VAS32 015 01 T1 = 95.400 Q1 = .324 HREF = .018

OMB VAS32 015 01 T1 = 95.400 Q1 = .324 HREF = .018

DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-13 (AEDC VA352)

PAGE 510

AEDC VA352 OH-13 ORB. FUSELAGE 277.525

(PTNF13) (23 APR 74)

REFERENCE DATA

REF = .4238 SQ.FT. $\text{WHP} = .0000 \text{ IN.}$
 LREF = 22.5803 IN. $\text{WHP} = .0000 \text{ IN.}$
 DREF = 18.3919 IN. $\text{WHP} = .0000 \text{ IN.}$
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.000
 B.FLAP = .000 ELEVON = .000
 HAW/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 $\text{TI} = 94.100 \text{ QI} = 1.003 \text{ HREF} = .025$

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L .3000 .4000 .5000 .6000 .7000 .8000
 Z
 7.525 .0126 .0104 .0308 .0114 .0045 .0010

MACH (1) = 8.000 ALPHA (2) = 35.000 $\text{TI} = 94.100 \text{ QI} = 1.003 \text{ HREF} = .025$

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L .3000 .4000 .5000 .6000 .7000 .8000
 Z
 7.525 .0134 .0140 .0228 .0076 .0033 .0008

MACH (1) = 8.000 ALPHA (3) = 40.000 $\text{TI} = 94.100 \text{ QI} = 1.003 \text{ HREF} = .025$

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L .3000 .4000 .5000 .6000 .7000 .8000
 Z
 7.525 .0134 .0196 .0180 .0067 .0013 .0006



AEDC VA352 OMB 01 ONE. FUSELAGE 277.525 (RTOP14) (25 APR 74)

REFERENCE DATA

REF = .0236 SQ.FT. XMRP = .0000 IN.
REF = 22.5023 IN. XMRP = .0000 IN.
REF = 16.3516 IN. XMRP = .0000 IN.
SCALE = .0175 SCALE

WACH (1) = 8.000 ALPHA (1) = 30.000 T1 = 98.530 Q1 = 1.994 WREF = .035

SECTION (1) OMB1 REF FUSELAGE DEPENDENT VARIABLE MU/AC

X/L 3000 4000 5000 6000 7000 8000

Z 7.525 .0128 .0062 .0270 .0170 .0018

WACH (1) = 8.000 ALPHA (2) = 30.000 T1 = 98.530 Q1 = 1.994 WREF = .035

SECTION (1) OMB1 REF FUSELAGE DEPENDENT VARIABLE MU/AC

X/L 3000 4000 5000 6000 7000 8000

Z 7.525 .0128 .0149 .0275 .0104 .0009

PARAMETRIC DATA

BETA = .000 RVAL = 2.000
B.FUAP = .000 ELEVON = .000
HAWAINT = 1.000

AEDC VA352 OH-6B 01 ORB. FUSELAGE Z=7.525

(RTWP15) (25 APR 74)

REFERENCE DATA

BREP = .258 SQ.FT. XMRP = .0000 IN.
 LREP = 22.5803 IN. YMRP = .0000 IN.
 BREP = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 25.000 T1 = 97.667 Q1 = 3.945 HREP = .049

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/HO

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.525 .0115 .0117 .0161 .0364 .0260 .0067

MACH (1) = 8.000 ALPHA (2) = 30.000 T1 = 97.667 Q1 = 3.945 HREP = .049

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/HO

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.525 .0126 .0083 .0196 .0394 .0063 .0035

MACH (1) = 8.000 ALPHA (3) = 35.000 T1 = 97.667 Q1 = 3.945 HREP = .049

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/HO

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.525 .0131 .0147 .0233 .0179 .0063 .0014

PARAMETRIC DATA

BETA = .000 RV/L = 3.780
 B.P.LAP = .000 ELEVON = .000
 HAWAHT = 1.000

 CALCULATED PAGE
 520


DATE 23 SEP 74

TABULATED DATA LISTING FOR OM48 (AEDC V4352)

PAGE 521

AEDC V4352 OM48 OF 006, FUSELAGE ZKT, 525

(RTN#17) (25 APR 74)

REFERENCE DATA

REF = .0236 84.77, XREF = .0000 14
 REF = 22.5803 IN, XREF = .0000 14
 REF = 18.3514 IN, XREF = .0000 14
 SCALE = .0175 SCALE

MACH (1) = 6.000 ALPHA (1) = 30.000 T1 = 97.700 Q1 = 3.949 HREF = .04
 MACH (2) = 7.525 ALPHA (2) = 30.000 T1 = 97.700 Q1 = 3.949 HREF = .04

SECTION (1) CAPTIVE FUSELAGE DEPENDENT VARIABLE HU/HO

X/L = .3000 .4000 .5000 .6000 .7000 .8000
 Z
 7.525 .0127 .0087 .0193 .0382 .0076 .0035

MACH (1) = 6.000 ALPHA (2) = 30.000 T1 = 97.700 Q1 = 3.949 HREF = .049
 MACH (2) = 7.525 ALPHA (2) = 30.000 T1 = 97.700 Q1 = 3.949 HREF = .049

SECTION (1) CAPTIVE FUSELAGE DEPENDENT VARIABLE HU/HO

X/L = .3000 .4000 .5000 .6000 .7000 .8000
 Z
 7.525 .0132 .0192 .0243 .0181 .0023 .0013

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
 B.P.LAP = 10.000 ELEVON = 5.000
 MAX/HIT = 1.000

(RTMP18) (25 APR 74)

AEDC VA352 OMB Q1 ORB. FUSELAGE ZPT.323

PARAMETRIC DATA

BETA = 5.000 RV/L = 3.720
 S.F.LAP = 10.000 ELEVATION = 5.000
 HAWAHT = 1.000

REFERENCE DATA

REF = .0236 30.17. XMRP = .0000 IN.
 LREF = 22.5803 IN. YMRP = .0000 IN.
 BREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.200 Q1 = 3.933 MREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/MD

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z
 7.525 .0155 .0124 .0223 .0391 .0631 .0124

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.200 Q1 = 3.933 MREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/MD

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z
 7.525 .0176 .0172 .0272 .0666 .0666 .0154



DATE 23 SEP 74 TABULATED DATA LISTING FOR OMIB (AEDC VAS32)

(RTWP19) (25 APR 74)

AEDC VAS32 OMIB Q1 ORB. FUELSAGE ZRP,525

PARAMETRIC DATA

BETA = -8.000 RN/L = 2.000
 B.P.LAP = 10.000 ELEVON = 5.000
 HAW/HT = 1.000

REFERENCE DATA

SRP = .8238 82.37. INRP = .0000 IN.
 LREF = 22.5803 IN. WRP = .0000 IN.
 SRP = 16.3919 IN. ZRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 96.650 Q1 = 1.983 HREF = .035

SECTION (1) ORBITER FUELSAGE DEPENDENT VARIABLE MU/HO

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z
 7.525 .0177 .0180 .0253 .0334 .0409 .0100

MACH (1) = 8.000 ALPHA (2) = 36.000 TI = 96.650 Q1 = 1.983 HREF = .035

SECTION (1) ORBITER FUELSAGE DEPENDENT VARIABLE MU/HO

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z
 7.525 .0184 .0183 .0310 .0377 .0176 .0086

DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VAS32)

PAGE 524

AEDC VAS32 OMB 01 ORB. FUSELAGE Z=7.525

(RTWP20) (25 APR 74)

REFERENCE DATA

REF = .0238 32.71. XMRP = .0000 IN.
 LREF = 22.5803 IN. YMRP = .0000 IN.
 SREF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 88.800 QI = 1.980 HREF = .039

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/MD

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.525 .0131 .0068 .0289 .0171 .0087 .0018

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 93.800 QI = 1.980 HREF = .039

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE MU/MD

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.525 .0127 .0194 .0278 .0096 .0040 .0008

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
 B.FLAP = 10.000 ELEVON = 9.000
 HAWKNT = 1.000



TABULATED DATA LISTING FOR OH-8 (AEDC VAS32)

DATE 23 SEP 74

(RTHP21) (25 APR 74)

AEDC VAS32 OH-8 Q1 ORB. FUSELAGE 247.525

REFERENCE DATA

WREF = .0238 30.0 FT. XMAP = .0000 IN.
 LREF = 22.5003 IN. YMAP = .0000 IN.
 SREF = .6.3919 IN. ZMAP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -6.000 RN/L = .900
 B.P.LAP = 10.000 ELEVON = 5.000
 HAW/HIT = 1.000

MACH (1) = 8.000 ALPHA (1) = 30.000 T1 = 91.980 Q1 = .518 MREF = .017

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/MD

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.325 .0177 .0164 .0334 .0486 .0144 .0059

MACH (1) = 8.000 ALPHA (2) = 35.000 T1 = 91.980 Q1 = .518 MREF = .017

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU/MD

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.325 .0164 .0196 .0472 .0217 .0266 .0040

DATE 23 SEP 74

TABULATED DATA LISTING FOR OMB (AEDC VA352)

PAGE 526

AEDC VA352 OMB 01 CRB. FUSELAGE 247.925

(RTW22) (25 APR 74)

REFERENCE DATA

REF = .8238 92.71. XMRP = .0000 IN.
 LREF = 22.3803 IN. XMRP = .0000 IN.
 BREF = 16.3919 IN. XMRP = .0000 IN.
 SCALE = .0175 SCALE

MACH (1) = 6.000 ALPHA (1) = 30.000 TI = 93.400 Q1 = .523 HREF = .018

SECTION (1) CRB FUSELAGE

DEPENDENT VARIABLE MU/HO

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.925 .0132 .0109 .0255 .0115 .0046 .0013

MACH (1) = 6.000 ALPHA (2) = 35.000 TI = 93.400 Q1 = .523 HREF = .018

SECTION (1) CRB FUSELAGE

DEPENDENT VARIABLE MU/HO

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.925 .0137 .0155 .0182 .0071 .0031 .0007

PARAMETRIC DATA

BETA = .000 RW/L = .900
 B.FLAP = .0000 ELEVON = 5.000
 HAWAHT = 1.000

DATE 23 SEP 74

TABULATED DATA LISTING FOR OH-6 (AEDC VA352)

PAGE 527

AEDC VA352 OH-6 01 ORB. FUSELAGE 247.925

(RTHP23) (23 APR 74)

REFERENCE DATA

REF = .0236 84. FT. XMRP = .0000 IN.
 LREF = 22.5803 IN. XMRP = .0000 IN.
 BREF = 14.3015 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .900
 B.FLAP = 10.000 ELEVON = 10.000
 HAWAHT = 1.000

MACH (1) = 8.000 ALPHA (1) = 25.000 T1 = 93.433 Q1 = .521 HREF = .018

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU+D

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.925 .0125 .0107 .0250 .0198 .0074 .0031

MACH (1) = 8.000 ALPHA (2) = 30.000 T1 = 93.433 Q1 = .521 HREF = .018

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU+D

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.925 .0132 .0128 .0266 .0105 .0043 .0010

MACH (1) = 8.000 ALPHA (3) = 35.000 T1 = 93.433 Q1 = .521 HREF = .018

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE MU+D

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.925 .0133 .0134 .0176 .0090 .0030 .0005

AEDC VA352 OMB 01 ORB. FUSELAGE Z47.525

(RTW724) (25 APR 74)

REFERENCE DATA

REF = .0238 90.FT. 1"=1" = .0000 IN.
 LREF = 22.5803 IN. 1"=1" = .0000 IN.
 EREF = 16.3919 IN. 2"=1" = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RM/L = .500
 S.F.LAP = 10.000 ELEVON = 10.000
 HAW/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/40

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.525 .0174 .0153 .0238 .0396 .0371 .0132

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/40

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.525 .0178 .0170 .0336 .0436 .0145 .0083

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/40

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.525 .0191 .0156 .0466 .0156 .0063 .0042



DATE 23 SEP 74

TABULATED DATA LISTING FOR OHB (AEDC VAS32)

PAGE 829

AEDC VAS32 OHB 01 OHB FUELSAGE 247.925

(RTWP25) (25 APR 74)

REFERENCE DATA

REF = .0236 SQ.FT. WHP = .0000 IN.
 LREF = 22.9875 IN. WHP = .0000 IN.
 REF = 16.3919 IN. WHP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RVAL = 2.000
 S.F.LAP = 10.000 ELEVON = 10.000
 HEIGHT = 1.000

MACH (1) = 0.000 ALPHA (1) = 30.000 TI = 94.650 Q1 = 1.965 HREF = .035

SECTION (1) OHB OVER FUELSAGE DEPENDENT VARIABLE MU/MD

R/L .3000 .4000 .5000 .6000 .7000 .8000
 2
 7.925 .0131 .0093 .0271 .0180 .0094 .0015

MACH (1) = 0.000 ALPHA (2) = 35.000 TI = 94.650 Q1 = 1.965 HREF = .035

SECTION (1) OHB OVER FUELSAGE DEPENDENT VARIABLE MU/MD

R/L .3000 .4000 .5000 .6000 .7000 .8000
 2
 7.925 .0132 .0148 .0289 .0086 .0039 .0006

AEDC VAS82 CH48 01 ONE. FUELSAGE 247.825

(RTW28) (25 APR 74)

REFERENCE DATA

REF = .0236 90 FT. XWSP = .0000 IN.
 LREF = 22.5003 IN. WSP = .0000 IN.
 CREF = 16.3619 IN. ZWSP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -8.000 RN/L = 2.000
 D.P.LAP = 10.000 ELEVON = 10.000
 MAN/MIT = 1.000

MACH (1) = 0.000 ALPHA (1) = 30.000 Y1 = 98.450 Q1 = 1.983 HREF = .035

SECTION (1) ONE PER FUELSAGE DEPENDENT VARIABLE MUAND

X/L .3000 .4000 .5000 .6000 .7000 .8000

2

7.925 .0175 .0137 .0247 .0226 .0383 .0087

MACH (1) = 0.000 ALPHA (2) = 30.000 Y1 = 98.450 Q1 = 1.983 HREF = .035

SECTION (1) ONE PER FUELSAGE DEPENDENT VARIABLE MUAND

X/L .3000 .4000 .5000 .6000 .7000 .8000

2

7.925 .0184 .0164 .0208 .0234 .0170 .0071

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DATE 83 SEP 74

TABULATED DATA LISTING FOR OHS (AEDC VAS32)

PAGE 331

AEDC VAS32 OHS Q1 ORB. FUELSAGE 247.825

(RTW27) (25 APR 74)

REFERENCE DATA

REF = .0236 90.FT. WHP = .0000 IN.
 LREF = 22.3803 IN. WHP = .0000 IN.
 DREF = 18.3919 IN. WHP = .0000 IN.
 SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 IN/L = 3.720
 B.FLAP = 10.000 ELEVON = 10.000
 MAWHT = 1.000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.387 Q1 = 3.936 MREF = .049

SECTION (1) ORBITER FUELSAGE DEPENDENT VARIABLE MUAD

W/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.325 .0117 .0114 .0183 .0410 .0960 .0082

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.387 Q1 = 3.936 MREF = .049

SECTION (1) ORBITER FUELSAGE DEPENDENT VARIABLE MUAD

W/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.325 .0126 .0102 .0196 .0394 .0062 .0036

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.387 Q1 = 3.936 MREF = .049

SECTION (1) ORBITER FUELSAGE DEPENDENT VARIABLE MUAD

W/L .3000 .4000 .5000 .6000 .7000 .8000

Z

7.325 .0132 .0196 .0235 .0187 .0064 .0019

ABULATED DATA LISTING FOR OMB (AEDC VA392)

DATE 23 SEP 74

(RTM28) (25 APR 74)

AEDC VA392 OMB 01 ORB. FUSELAGE Z77.525

PARAMETRIC DATA

REFERENCE DATA

REF = .0238 SQ.FT. XMRP = .0000 IN.
 LIFE = 22.5603 IN. YMRP = .0000 IN.
 REF = 16.3919 IN. ZMRP = .0000 IN.
 SCALE = .0175 SCALE

BETA = -9.000 RM/L = 3.720
 B.FLAP = 10.000 ELEVON = 10.000
 HAW/HT = 1.000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT . RIABLE HU/HO

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z
 7.525 .0171 .0184 .0218 .0307 .0302 .0270

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z
 7.525 .0173 .0147 .0234 .0376 .0618 .0238

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L .3000 .4000 .5000 .6000 .7000 .8000

Z
 7.525 .0174 .0175 .0289 .0554 .0922 .0136

